

EXHIBIT 10

Appendix A

Table of Contents

1	INTRODUCTION	2
1.1	SETTING A ZONE SCENE	2
2	INVOKING A SCENE.....	5
2.1	HANDHELD CONTROLLER.....	5
2.2	DESKTOP CONTROLLERS	8
3	SCENE SETUP.....	9
3.1	HANDHELD CONTROLLER.....	9
3.2	DESKTOP CONTROLLERS	9
3.3	ADDITIONAL SETUP IDEAS	16
4	ALTERNATIVE LINKING METHODS.....	17
4.1	MULTIPLE SELECT IN LINK AND DROP ZONE PANELS	17
5	RELATED IDEAS	19
5.1	ZONE SCENES THAT PLAY MUSIC	19
5.2	RELATIONSHIP TO THE ALARM CLOCK	19
5.3	COMPRESS ZONES IN THE ZONE MENU	20

Sonos UI Specification: Zone Scenes

1 Introduction

The Zone Scene feature allows the user to arrange the zones into groups using one single command. However, the Zone Scene feature is much more flexible and powerful.

Currently in the Sonos UI, zone groups are created by manually linking zones one at a time until the desired zone grouping is reached.

For Example

Start with **Living Room**

- Link the Kitchen to the Living Room to make a group of (**Living Room + Kitchen**)
- Then link the Den to the (**Living Room + Kitchen**) to make a group of (**Living Room + Kitchen + Den**)

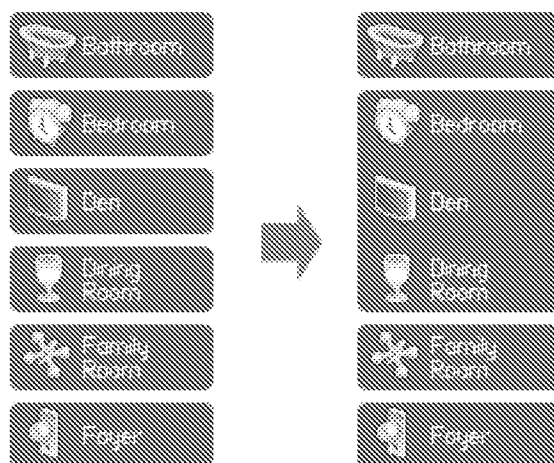
The Zone Scene feature would allow the user to create a group of (**Living Room + Kitchen + Den**) with one command.

1.1 Setting a Zone Scene**1.1.1 Simple Scenes**

Simple scenes allow the user to set up a single zone group per scene.

For example:

“Morning Scene” would group Bedroom + Den + Dining Room, but would leave all other zones in the house untouched.



Note: Zones do not need to be separated before the Scene is invoked.

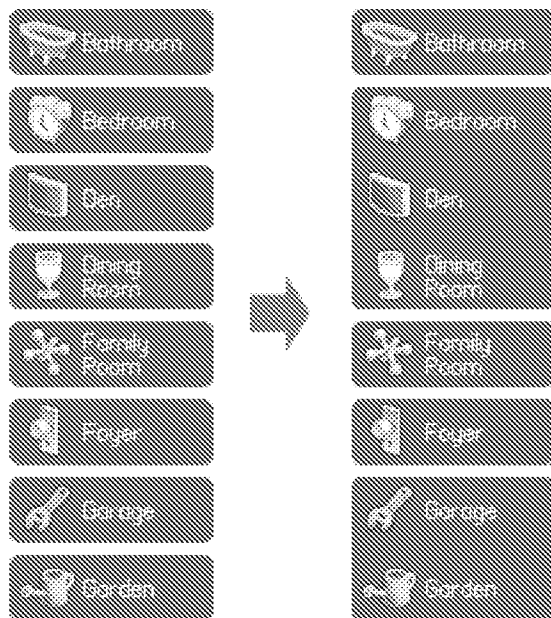
1.1.2 Advanced Scenes

Sonos UI Specification: Zone Scenes

User can define multiple groups to be gathered at the same time.

For example: “Evening Scene” should link the following zones

- **Group1**
 - Bedroom
 - Den
 - Dining Room
- **Group 2**
 - Garage
 - Garden
- **And finally**, Bathroom, Family Room and Foyer should be separated from any group if they were part of a group before the Zone Scene was invoked.



Note: Zones do not need to be separated before the Scene is invoked.

Sonos UI Specification: Zone Scenes

1.1.3 What happens to the Music that's already playing when a Zone Scene is started.

If no music is playing in any Zone – then the zones will simply link in a group.

If music is playing in one or more zones there are several possibilities (TBD)

1. The Music Queue in the zone group that was formed by the Zone Scene will be empty. In other words – the music will stop in any room that is part of the Zone Scene. This is the simplest solution, but may lead to frustration.
2. The user gets to choose from which of the 'joining' Queues the new zone group should play. This could be in the form of a dialog:

What should the new Zone Group play?

No Music

Track 1

Track 2

Radio Station A

Note that this method would only be useful (and possible) with simple Zone Scene grouping. With Advanced Zone Scene groupings, this dialog would become much too complicated.

3. In the case where only one of the zones in the new group was playing music, the new group should take the music (and Queue) of that zone.

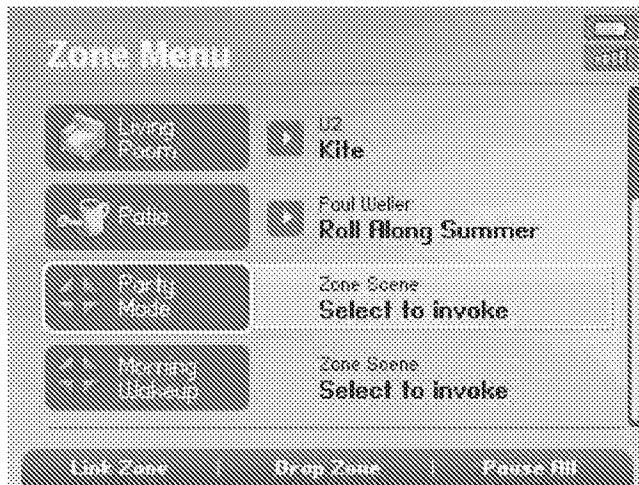
Sonos UI Specification: Zone Scenes

2 Invoking a Scene

There are various user Interface methods for invoking a configuration on a Handheld Controller or Desktop Controller

2.1 Handheld Controller

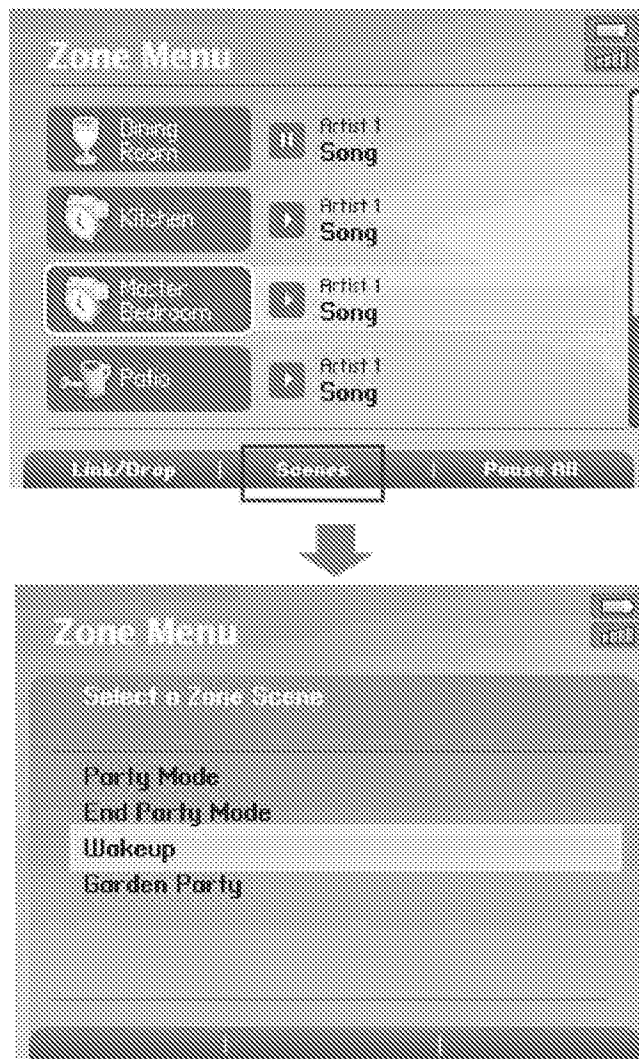
2.1.1 Method 1: Include Scenes in the Zone menu



Sonos UI Specification: Zone Scenes

2.1.2 Method 2: Zone Scenes as a soft button

The Link/Drop Zone commands are placed under one softkey and the middle softkey now becomes “Scenes”. Pressing the scene softkey will show the Scene menu where all the available scenes are shown.

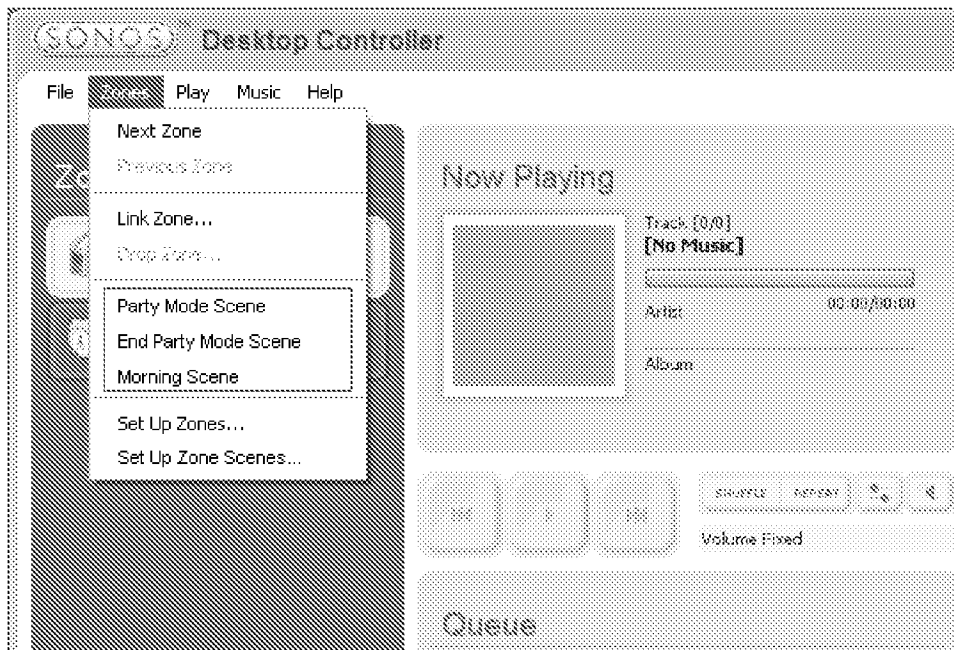


TBD: We could remove Pause All (and place it somewhere else. This would allow us to put Zone Scenes on the right soft button).

Sonos UI Specification: Zone Scenes

2.1.3 Method 3. Zone Scenes as part of “Link Zones” Dialog.



Sonos UI Specification: Zone Scenes**2.2 Desktop Controllers****2.2.1 Method 1: As part of 'Zones' application menu****2.2.2 Method 2: As part pf the Zones panel**

Sonos UI Specification: Zone Scenes

3 Scene Setup

3.1 Handheld Controller

It is not expected that the Zone Scenes should be set up using the Handheld Controller

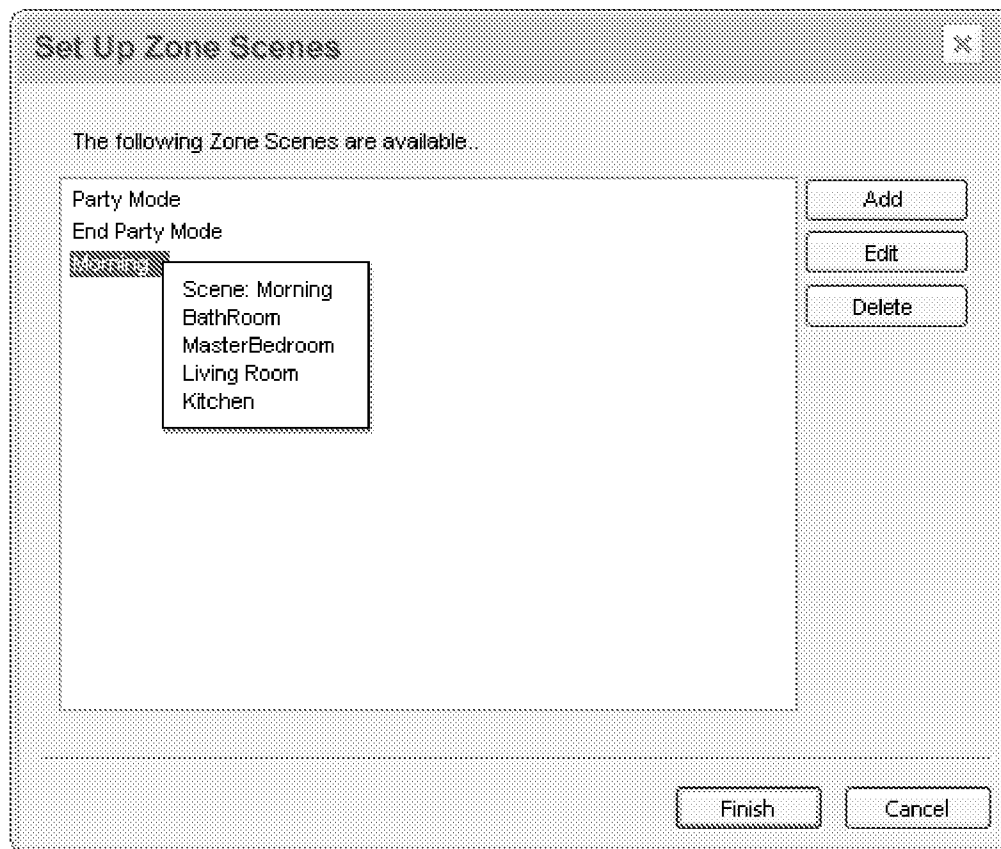
3.2 Desktop Controllers

Zone Scene Setup is available from the Zones menu on the DCRs.



“Set Up Zone Scenes...” is available from the Zones menu.

Sonos UI Specification: Zone Scenes

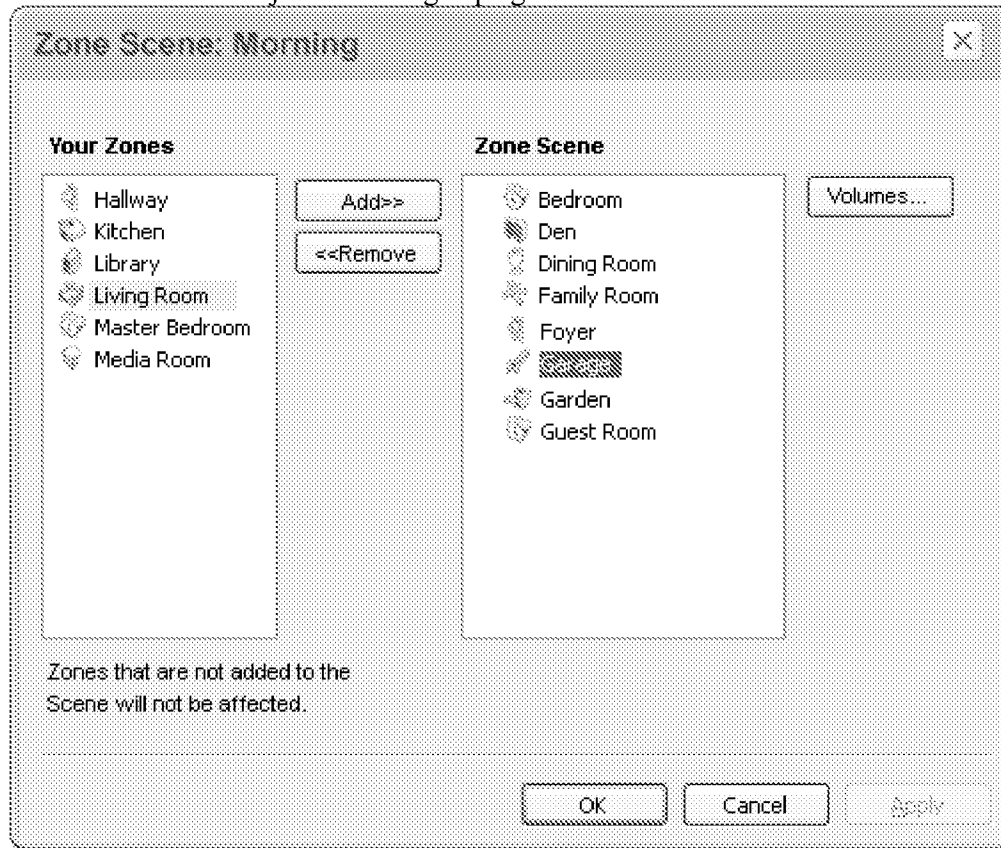


- Zone Scenes can be Add, Edited or Deleted
- The tool tip shows an overview of the zones that make up a scene

Sonos UI Specification: Zone Scenes

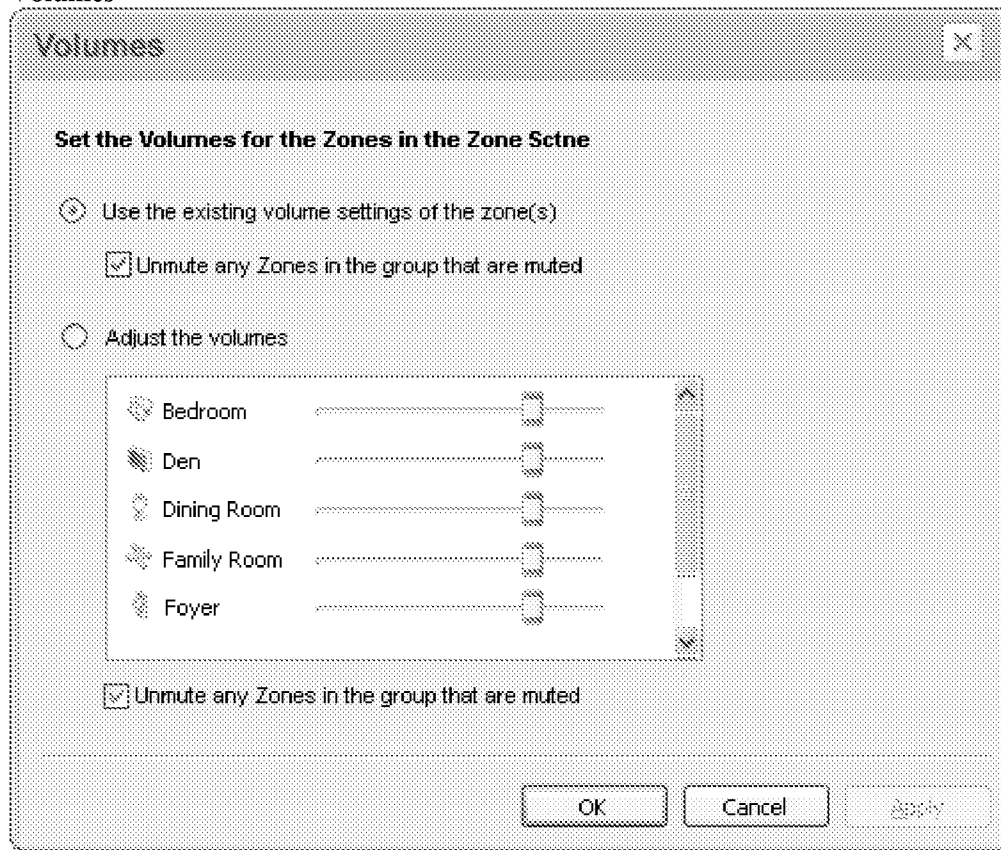
3.2.1 Simple Scenes

Each Scene consists of just one zone grouping.



- The panel on the left shows the available zones in the household.
- The panel on the right shows the Zones that will be grouped as part of this scene.
- The Add/Remove buttons move zones between the panels.
- Zones can be dragged between panels.
- The Zones that are not part of this scene will remain unaffected by the scene.

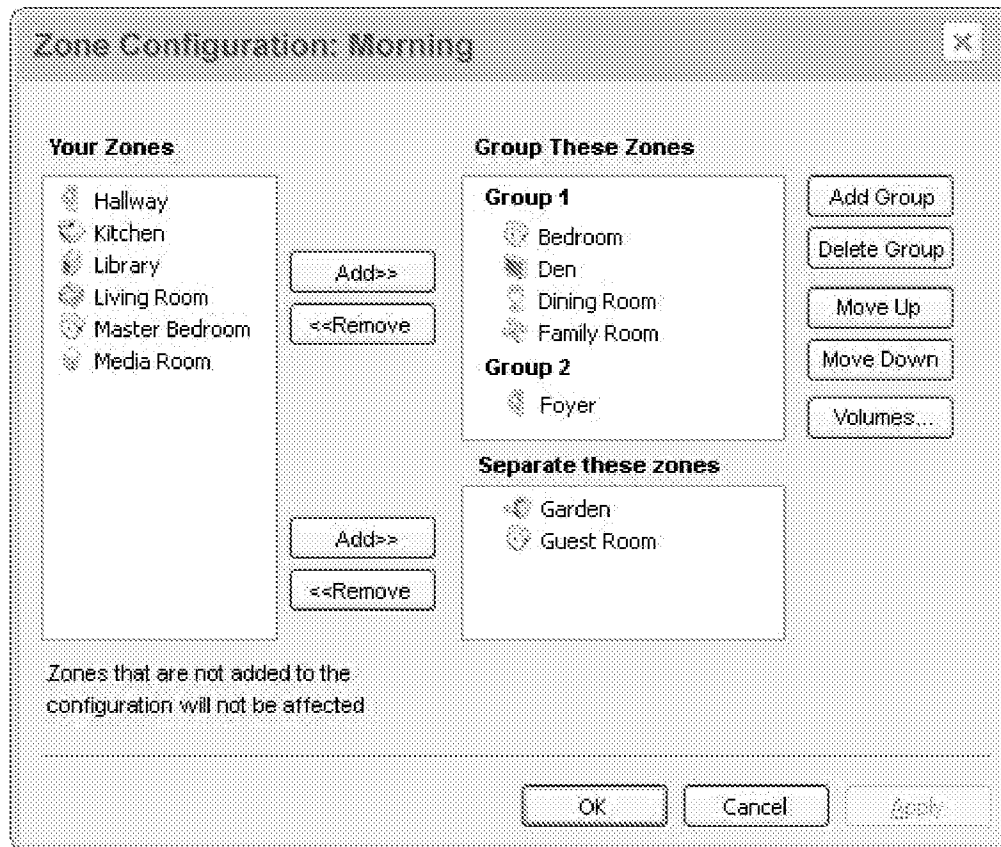
Volumes



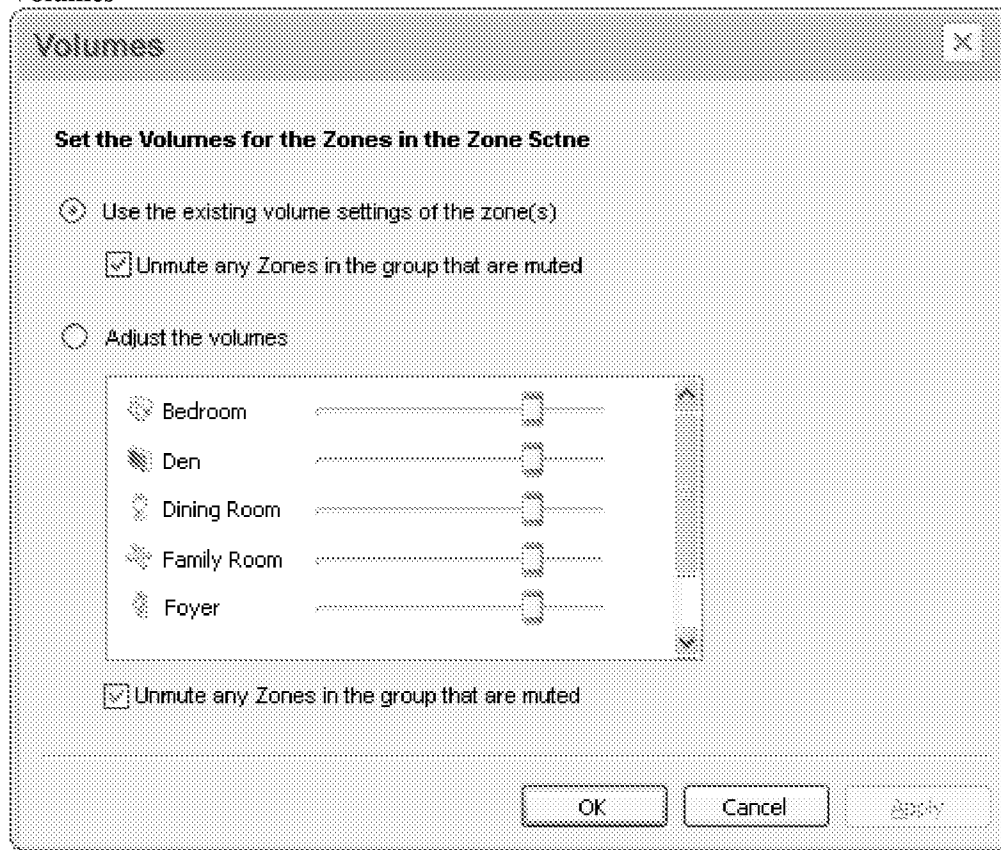
- The ‘Volumes...’ button allows the user to affect the volumes of the zones when a Zone Scene is invoked.
- The Zones can be set to retain whatever volume that they currently have when the Scene is invoked.
- Additionally the user can decide if Volumes should be unmuted when the Scene is invoked.
- Alternatively, the user can define the Volume of each zone in the Zone Scene.

3.2.2 Simple Scene (each scene makes one zone group)

Each Scene can consist of multiple groupings. In addition zones can be separated if they were part of a group before the scene was invoked.

Sonos UI Specification: Zone Scenes

- Left panel shows the available zones in a system
- The upper right panel shows the zones that will be grouped as part of this configuration.
 - Multiple groups can be created with the “Add Group” button
 - Groups can be deleted using the “Delete Group” button
 - Zones can be moved between groups
- The lower right panel shows the zones that will be actively separated when the scene is invoked (if they were part of any before).
- Zones can be moved from the left panel to either of the right panels using the “Add” buttons, or through drag and drop/
- Likewise, zones can be moved from either of the right side panels to the left panel using the “Remove” buttons, or through drag and drop.

Sonos UI Specification: Zone Scenes**Volumes**

- The ‘Volumes...’ button allows the user to affect the volumes of the zones when a Zone Scene is invoked.
- The Zones can be set to retain whatever volume that they currently have when the Scene is invoked.
- Additionally the user can decide if Volumes should be unmuted when the Scene is invoked.
- Alternatively, the user can define the Volume of each zone in the Zone Scene.

3.3 Additional setup ideas

Capture a Zone Scene from an existing setup in the Zone Menu. Right click on a current Zone group and have a menu item “Make this group a Scene”.

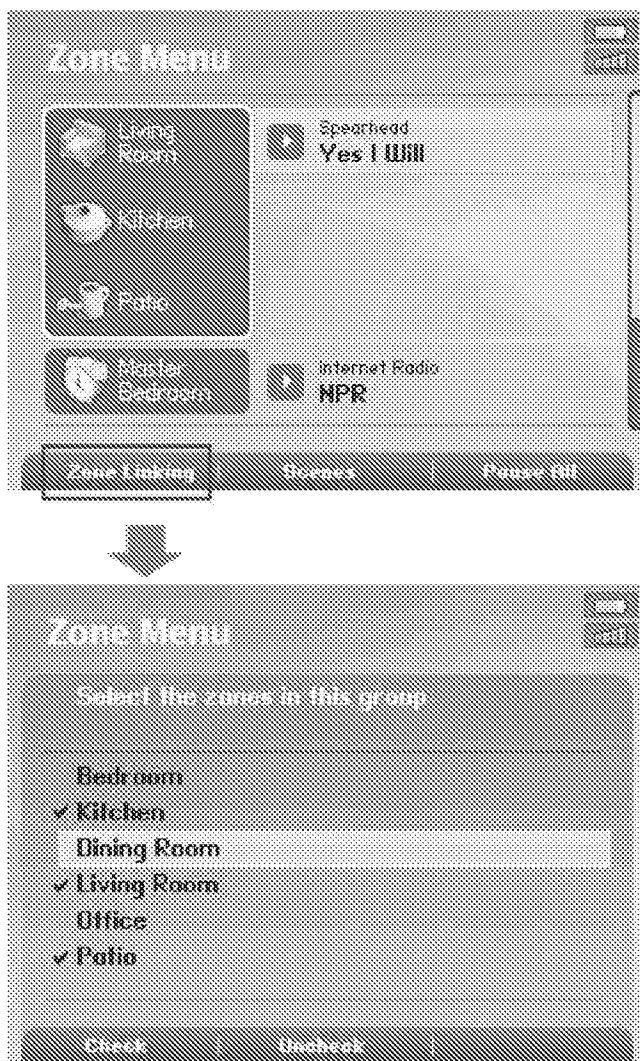
4 Alternative Linking Methods

4.1 Multiple Select in Link and Drop Zone panels

This feature is an adaptation of the Link and Drop Zone feature.

Currently, as discussed in the introduction of this document, the current Link and Drop Zones features allow the user to link and drop Zones one at a time. This feature would allow the user to link and drop multiple zones in one screen.

Using this methodology, the action Link and Drop zones can be achieved on one screen. In addition, because of the flexibility of this UI, Music can easily be moved from one zone to another.



- The list of zones in the screen above includes ALL the zones in the system, including the Zones that are already grouped.

Sonos UI Specification: Zone Scenes

- User can check Zones that will be part of a zone group, and uncheck those that won't be part of a group
- Using this method it is possible to move music from one zone to another. For example, to move the music from the Living Room to the Kitchen
 - User is playing 'Radio 1' in the Living Room only
 - From the Zone Menu, press the Zone Linking soft button
 - Check the Kitchen, uncheck the Living Room
 - Hit the OK button
 - Result – Radio 1 is now playing in the Kitchen and not the Living Room (without interrupting the music).

5 Related Ideas

5.1 Zone Scenes that play music

In addition to the notion of Zone Scenes that contain information about Zone Groups and the Volumes of individual Zones in a group. It is also possible to extend the idea to enable specific music to be played when a particular Zone Scene is invoked:

For instance.

Wakeup Zone Scene should link Living Room and Bedroom, set their volumes and play “Wakeup Music” playlist (or a Radio station)

5.2 Relationship to the Alarm Clock

The Sonos Alarm Clock/Music Scheduler allows a user to setup a Sonos system to play music in certain zones at certain times of the day.

In addition it is possible that an alarm clock can also invoke a Zone Scene.

For example. In a system with 4 Zones: Bedroom, Bathroom, Dining Room, Kitchen.

At the end of the day the user has all of the Zones linked into one group.

He has an alarm clock that is set to play National Public Radio at 7am and the alarm should play in the Bedroom and Bathroom, but not the Dining Room and Kitchen.

The Alarm is thus configured to invoke a Zone Scene that links the Bedroom and Bathroom into a group, but leaves the Dining Room and Kitchen out of the group.

Sonos UI Specification: Zone Scenes

5.3 Compress Zones in the Zone Menu

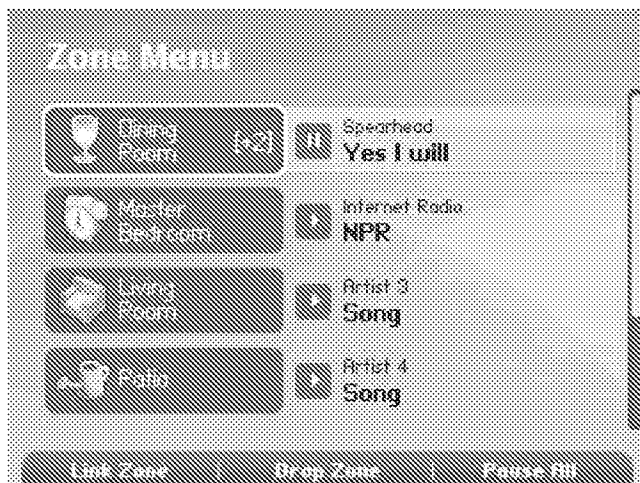
This concept is aimed at households that have more than a few ZonePlayers.

Current Design.



Zone Groups are shown linked together in a gray box. This is a good design for household with fewer than, say, 8 Zones. With more Zones however, a lot of scrolling is required to navigate between zones.

The design below shows how grouped zones are compressed so that they occupy a single item in the Zone Menu. The [+n] signifies the additional number zones that make up the group.



The individual zones in a group WILL show in the Zone bar on the Now playing Screen and Music Browse, as well as the link and unlink screens.

Appendix B

Table of Contents

1	TO DO ITEMS	2
2	REQUIREMENTS	3
2.1	NEED	3
2.2	GENERAL RULES FOR THE ALARM.....	3
3	UI SPEC FOR HANDHELD CR.....	4
3.1	CLOCKS AND ALARMS MENU	4
3.2	SHOW CLOCK SCREEN.....	5
3.3	ALARM PLAYS.....	6
3.4	SLEEP TIMER	9
3.5	ALARMS OVERVIEW	11
3.6	NEW ALBUM AND EDITING AN EXISTING ALARM.....	12
3.7	ALARM SETTINGS/VARIABLES	13
3.8	SETTING THE CURRENT DATE AND TIME	21
3.9	BUZZER	25
4	UI SPEC FOR DCRS	26
4.1	PC MENU	26
4.2	SLEEP TIMER	27
4.3	CLOCK AND ALARMS	29
4.4	EDIT AN ALARM	30
4.5	SETTING THE CURRENT DATE AND TIME ON THE DESKTOP CONTROLLERS.....	33
4.6	SETTING ALARM MUSIC DIRECTLY FROM THE MUSIC LIBRARY	34
4.7	BUZZER	34
5	DATE AND TIME FORMATS.....	35
5.1	DATE FORMATS.....	35
5.2	TIME FORMATS.....	36
6	SPECIAL CASES.....	37
6.1	LOST ZONEPLAYERS AND HIDDEN ZONEPLAYERS - HHCR.....	37
6.2	LOST ZONEPLAYERS AND HIDDEN ZONEPLAYERS - DCRS	39
6.3	NO DATE OR TIME - HHCR.....	40
6.4	NO DATE OR TIME - DCRS	43

Sonos UI Specification: Alarm Clock

1 To Do Items

1.1.1 To Do

- Graphic Design for clock face – may need PixelMedia input
- Tone for backup buzzer to be designed
- Scenarios for backup buzzer

1.1.2 TBD items

- Should the low brightness clock face move around the screen as a screen saver (repositioned every once in a while (not sliding around))
- Add play mode (shuffle/repeat)
- Default settings for a new alarm
- Can the DCR sleep timer count in the menu change with time, or does it need to be fixed.
- Should time and date settings fields change if the user has 12/24 hour clock etc.
- Rhapsody and Current Queue as music choices for an alarm.
- DCR state when time is lost (due to power failure)

Sonos UI Specification: Alarm Clock

2 Requirements

2.1 Need

Regular requests from users to provide the following:

- Ability to schedule music to wake to.
- Ability to schedule music at other times. For example, “I want to hear music when I come home from work at 6pm”
- Ability to fall asleep playing music, and for the music to play for a defined period (Sleep Timer)
- Ability to replace their current alarm clock with a large clock view on the Controller.

2.2 General rules for the alarm

2.2.1 Zones

- A single zone can be assigned to an alarm. When the alarm sounds, it will sound in that zone + any zones are linked to the alarm zone at the time of the alarm

2.2.2 Volume ramp

- Alarms will ramp from 0 to the zone’s set volume level in 60 seconds (exact time TBD)

2.2.3 Backup Buzzer

If, for any reason, the scheduled music won’t play (empty playlist, no connection to a share, failed UPnP, no Internet connection for an Internet Radio station), a backup buzzer will sound. This buzzer will be a sound file that is stored in ZPs –not on a share (for obvious reasons).

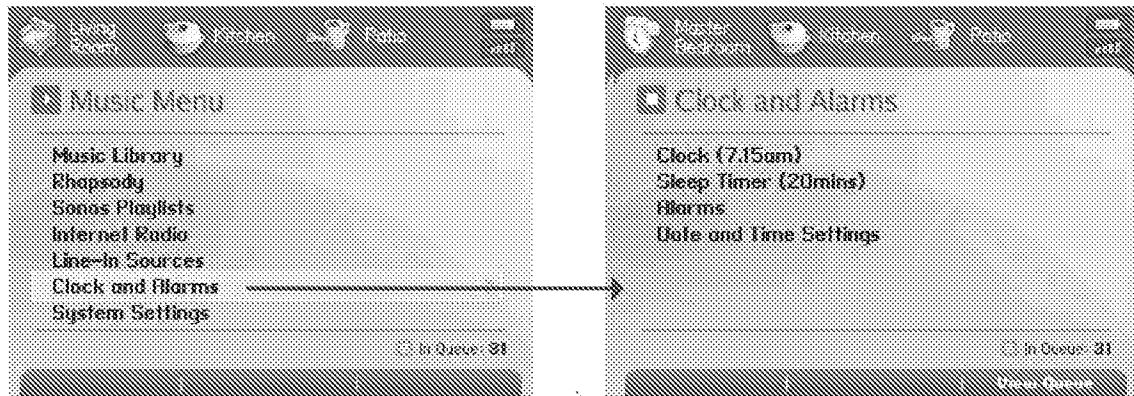
The buzzer sound will be designed for Sonos and will fit the Sonos brand

Sonos UI Specification: Alarm Clock

3 UI Spec for Handheld CR

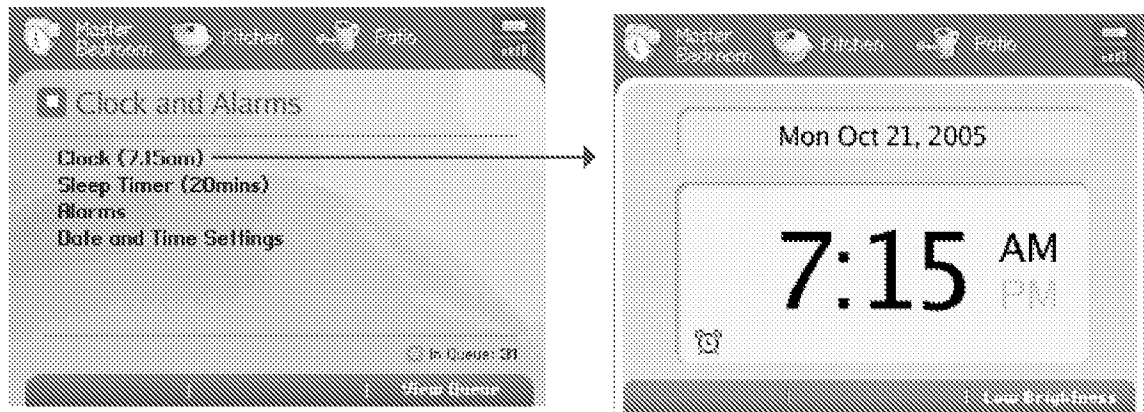
3.1 Clocks and Alarms Menu


- The Clocks and Alarms section of the UI can be found on the Music Menu above System Settings



- The time in parenthesis after the “Show Clock” item should be updated with the current system time.
- The time in the parenthesis should be removed if the system has no time set (because the time was never set properly, or a connection to the Internet time has been lost and the ZP power-recycled)

Sonos UI Specification: Alarm Clock

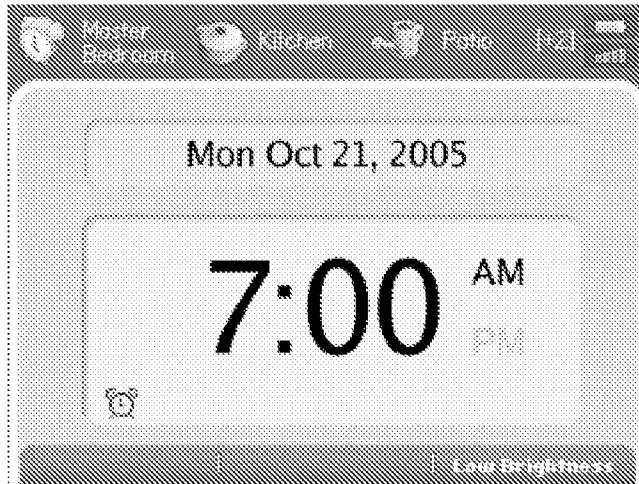
3.2 Show Clock Screen

- The clock is zone-group contextual.
- Press OK on this screen returns the user to the Clock menu (same behavior as a pop-up).
- Press Back on this screen returns the user to the Clock menu (same behavior as a pop-up).
- The clock icon  indicates that one or more alarms are set for this zone group.
- Unlinking a zone, may affect the presence of the alarm icon.
- The ‘low brightness’ softkey brings up a version of this screen shown below.

3.2.1 Low Brightness mode

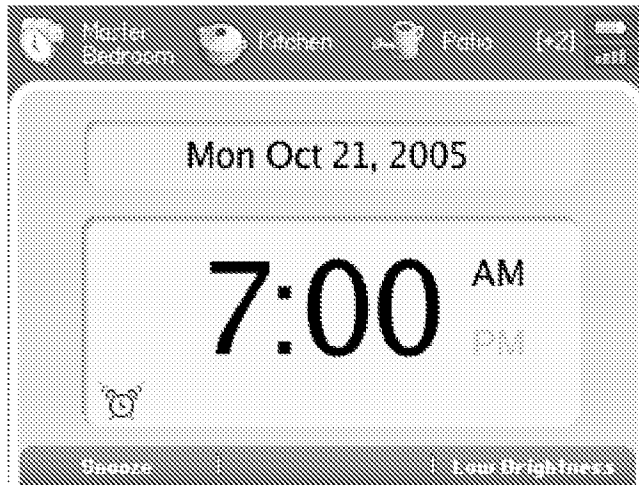
- When the user presses the “Low Brightness” soft button, the screen brightness will be reduced to 25%. The user setting in the CR settings will not be affected.
- Pressing any button will return the screen to the user-set brightness.
- When an alarm goes in that zone/group, the contrast will return the screen to the user-set brightness.

Sonos UI Specification: Alarm Clock

3.3 Alarm Plays**Clock Screen**

- The clock icon shows if there is at least one alarm in the ON state for one or more of the zones that the CR is currently viewing (in this case Master Bedroom, Kitchen, Dining Room).
- If no alarms are present, in the ON state, for the zone or zones that the CR is viewing, the icon will be removed.
- Note the case where an alarm is set to “Once” - when the alarm is complete (see duration and snooze rules below) the icon will be removed (as long as there are no further alarms set for zones in this group).

Sonos UI Specification: Alarm Clock

Alarm Plays

The clock icon changes to its “active state” (the sound waves).

The snooze softkey appears.

The Snooze and the active clock icon will be displayed:

- For the duration of the Alarm, up to a maximum of 2 hours (if the user has set the duration to ‘no limit’, the snooze and active clock will show for 2 hours only).
- AND as long as music is playing in that Zone Group. If the music is stopped, the snooze button and active state clock icon are cleared from the UI
- ‘Stopped music’ can be achieved though:
 - Play/pause button
 - Clear Queue
 - Music Queue ends (runs out of music)
 - Technical reason for music stopping (lost connection etc.)

The Snooze button and active clock icon can be passed around zones using link/unlink in the same way as the alarm duration.

Snooze operation

- Pressing the snooze button will cause the alarm to play again 9 minutes later (the actual Alarm settings are not changed).
- Pressing the snooze button again during the ‘snoozing period’ (the silent period), will offset the alarm by 9 minutes from that point.
- Multiple presses of the snooze button will not accumulate snooze time (9+9+9=27 minutes snooze).
- During the 9 minute snooze period, a ‘snoozing’ icon will show on the screen
- During the 9 minute snooze period, the clock icon will continue to show its ‘active clock’ state.
- During the 9 minute snooze period, the Snooze softkey will continue to show.
- If the music is stopped (see rules above) – the snooze state will be cleared (removing the Snoozing icon and Snooze button).

Sonos UI Specification: Alarm Clock



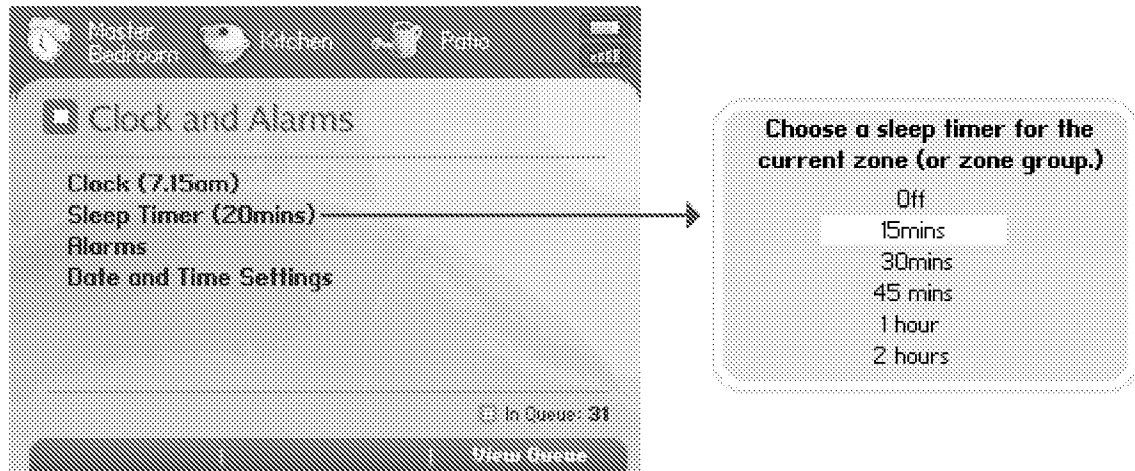
Other items

If another alarm plays for a zone in this group – all the original alarm and snooze states are cleared.

Low Brightness

Same rules apply as described above

Sonos UI Specification: Alarm Clock

3.4 Sleep Timer

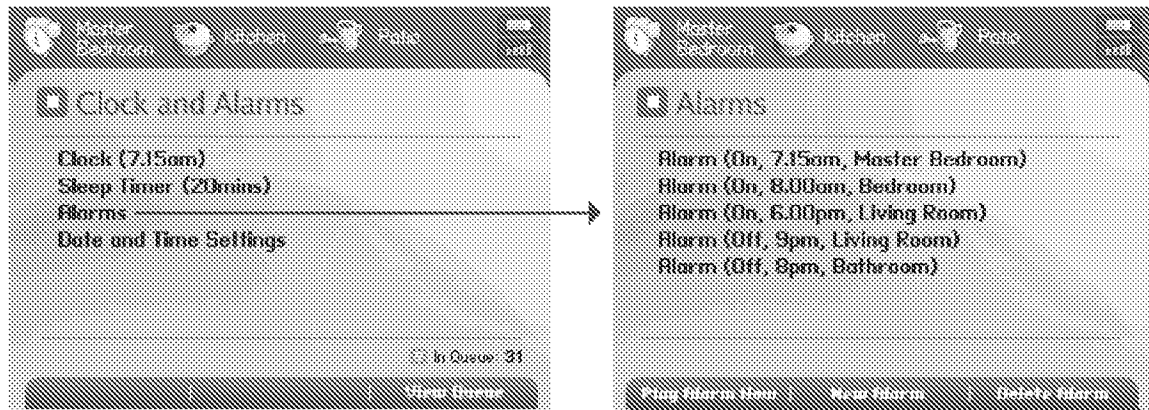
- Sleep timer will have the following variables: Off, 15min, 30mins, 45mins, 1hours, 2 hours.
- A sleep timer applies to all the current zones in the current group
- When the sleep timer stops (i.e. the time reaches 0 seconds), it should revert to 'Off'.
- At the end of the sleep time (0 seconds), the current Zone Group should be Paused.
- The time in parenthesis should show the count down.
- If the current zone group is already paused, no changes to the play head will be made.
- (the alarm timer is the same as the sleep time, described later in this document)

Rules for Zone Group changes while the Sleep timer is active

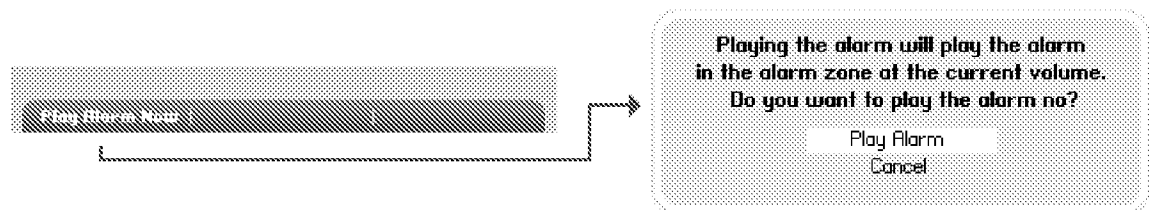
- A Sleep timer is set for the current zone (or zone group) that the user is viewing on the CR. The timer is applied to all the zones in that particular group.
- Any zone added to the zone group takes on the same timer.
- Any zone dropped from the group will have it's timer reset to Off.
- Any zone taken by another group will take the timer of the group it is joining (i.e. it will lose it's original timer).
- Pausing the music has no effect on a sleep timer .
- Clearing the Queue has no effect on a sleep time .
- Altering the Queue (adding, moving, deleting tracks) has no effect on the sleep timer
- The user can change the timer settings while it is running (i.e. turn it off, or change the sleep time).

Sonos UI Specification: Alarm Clock**Alarm length/Sleep timer icon on Now Playing Screen**

- The sleep timer icon is shown next to the Shuffle and Repeat icons
- The right edge of the snooze icon aligns with the right edge of the track progress bar
- The separation between the icons is 5 clear pixels
- The blue Rhapsody Radio ‘bubble’ should be horizontally resized when the snooze icon is present.
- The gap between the right edge of the blue bubble and the left edge of the snooze icon should be 5 clear pixels.
- The snooze icon should site in the vertically in the middle of the blue bubble (5 pixels above, 5 below).

Sonos UI Specification: Alarm Clock**3.5 Alarms Overview**

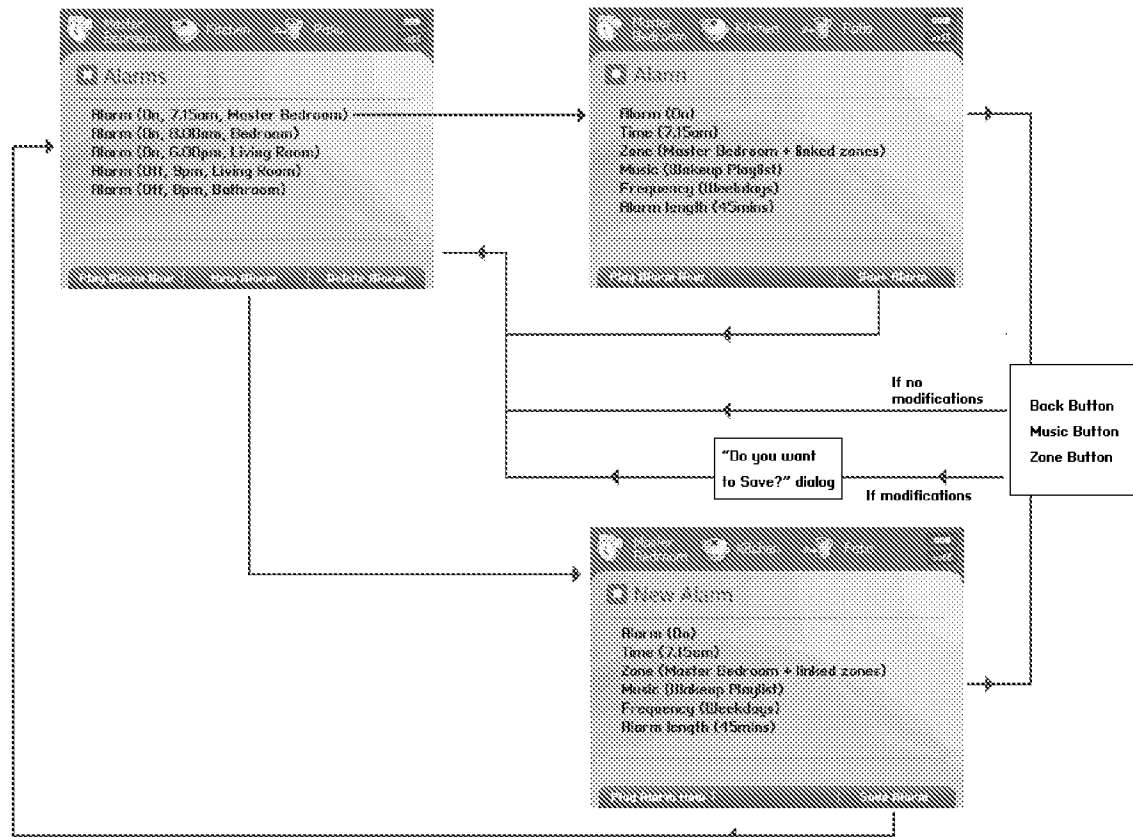
Note the absence of the View Queue and Queue Counter when we go one level deeper in the alarm UI. This is to reduce any confusion that may occur between the Alarm music and the Current Queue of music.

Play Alarm Now soft button

User selects 'Play Alarm' from the pop-up. The alarm will activate.

- The UI will stay on the same screen (but without the popup)
- TBD – this may change if alarms automatically trigger the clock view

3.6 New Alarm and Editing an existing alarm



New Alarm

- Adds a new alarm with the default settings
- The screen navigates to show the new alarm page.
- The system can contain up to 32 alarms
- If the limits of 32 alarms is reached, add alarm will trigger the following popup message (the UI will not navigate to the “New Alarm” page).
 - You can’t add any more alarms, please delete an alarm before you add a new one.
 - Press Ok to Continue.
- The default settings for an alarm are described in the section below.

Edit Alarm

Clicking OK on an existing alarm will navigate the UI to that alarm’s edit page.

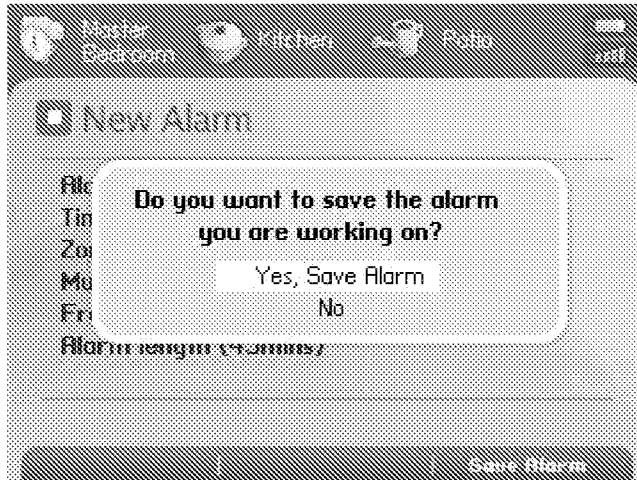
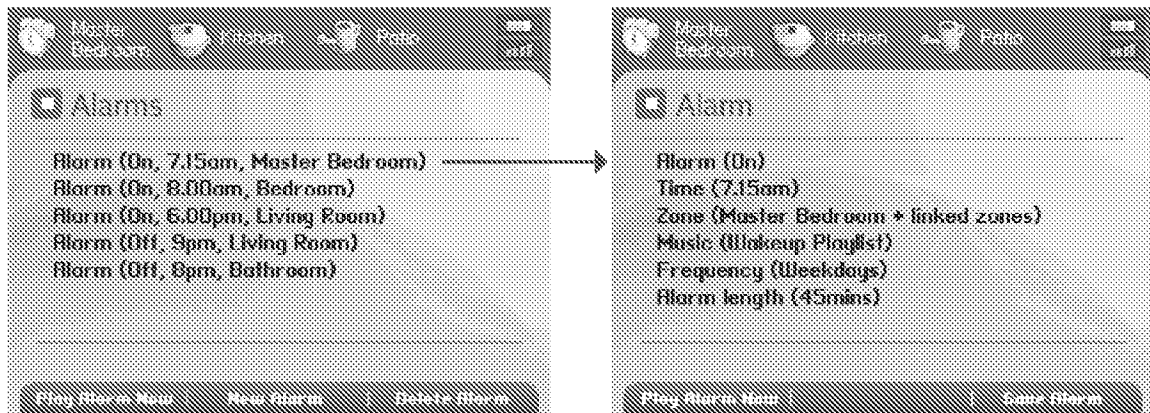
Save Alarm

Pressing the Save button will save the alarm and navigate to the Alarms List screen. No confirmation will be shown (Save is an explicit action that doesn’t result in deleted information if pressed by mistake).

Sonos UI Specification: Alarm Clock**Navigating Away from the New/Edit Alarm page**

If an alarm has been edited, or the alarm is new and the following navigation buttons are pressed, a resultant confirmation box will be shown.

Back button
Zones button
Music button

**3.7 Alarm Settings/Variables**

Each alarm will have the following variables

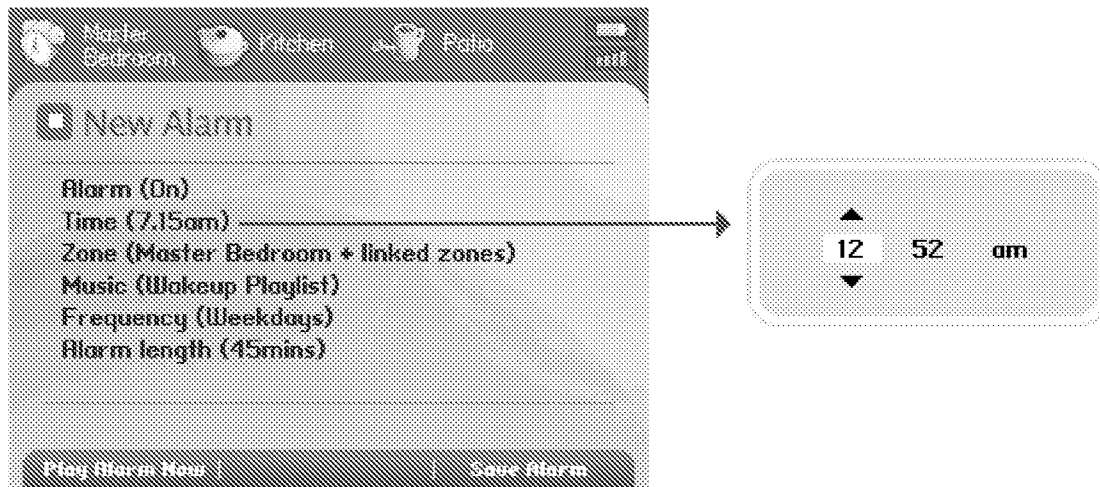
- Alarm On/Off
- Time
- Zone
- Music
- Frequency [once]
- Alarm Length
- *Play Mode (TBD we may add shuffle mode as an option)*

Sonos UI Specification: Alarm Clock

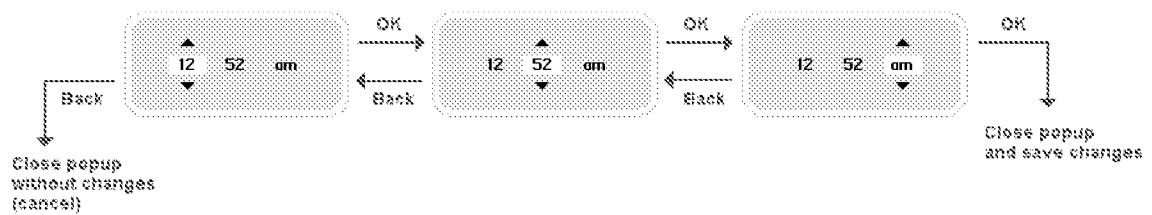
3.7.1 Alarm on/off



This allows the alarm to be turned on/off without losing the alarm settings.

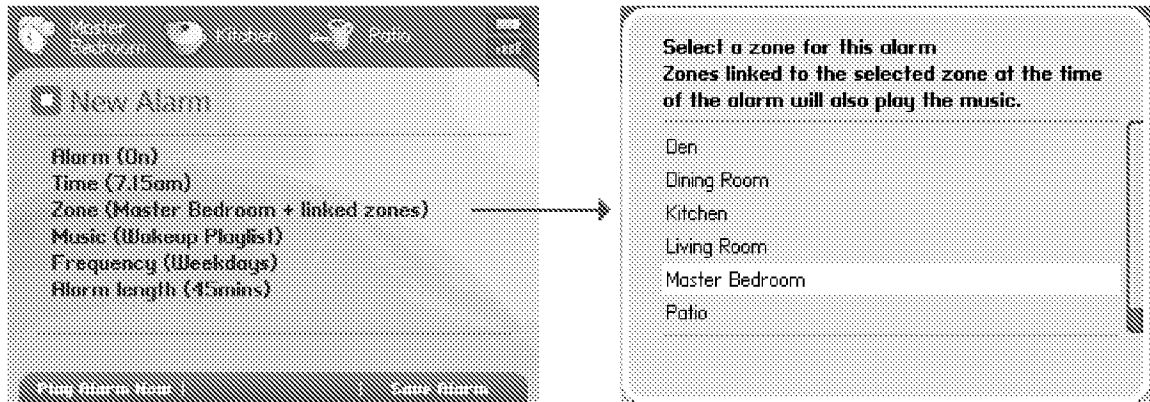
Sonos UI Specification: Alarm Clock**3.7.2 Alarm Time**

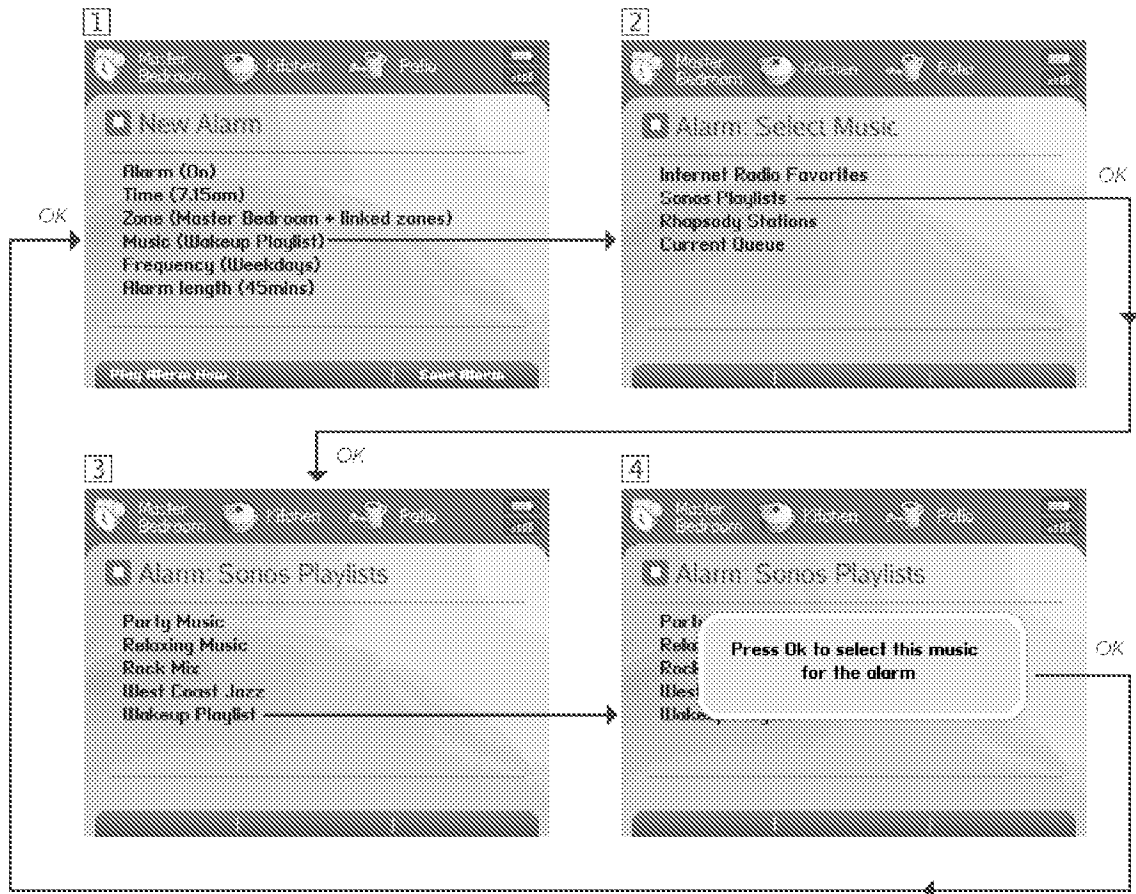
- The time set popup consists of three fields
- TBD – should the 3 fields become 2 if the user has set the system to 24 hour clock?



Sonos UI Specification: Alarm Clock

3.7.3 Alarm Zone



Sonos UI Specification: Alarm Clock**3.7.4 Alarm Music**

- The Select Music UI is a limited form of the regular CR music browse
- The user should not be able to drill down to the track level
- On the level *above* the track level, if the user presses OK, they will see the confirmation dialog.
- When the user press OK on the confirmation dialog, the UI should return to the main Alarm variables page (top left of above diagram). This transition is made without an animation.
- Rhapsody Stations and Current Queue are TBD items

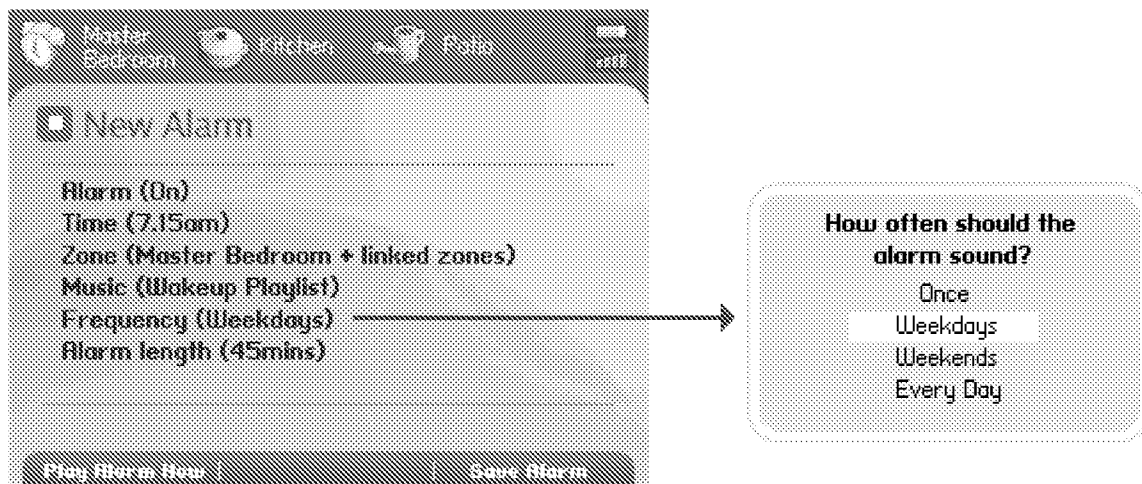
Relationship to the Now Playing Screen and Back Button.

If the user presses the Music button while on the alarm screens, the UI will navigate to the Now Playing screen.

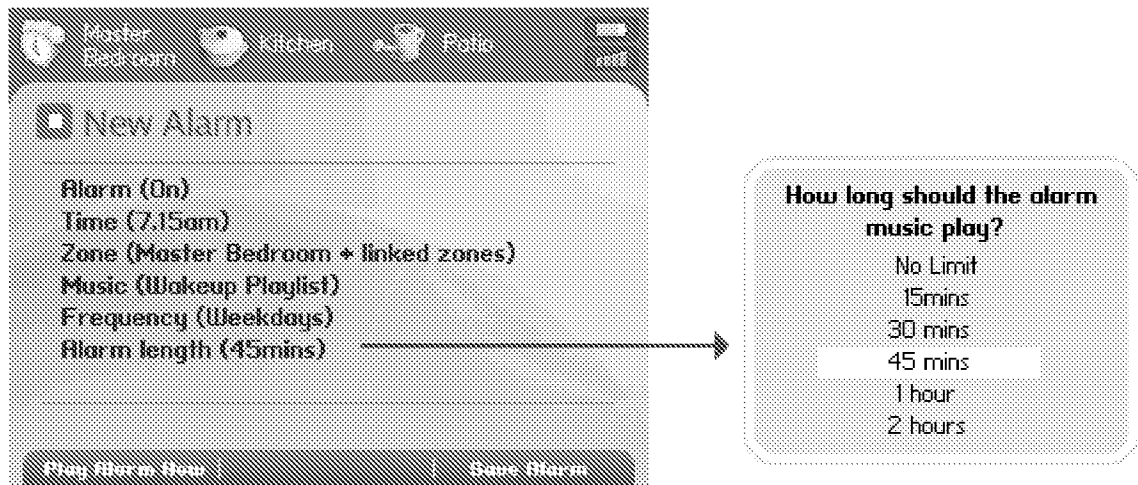
If the user navigates to the Now Playing screen from screens 2, 3 or 4 (above), and subsequently press the Back button, the UI should navigate back to screen 1 (and not 2, 3, or 4). This is designed to avoid confusion between the Music choices for the alarm and music choices for general playback.

Sonos UI Specification: Alarm Clock

3.7.5 Alarm Frequency



Sonos UI Specification: Alarm Clock

3.7.6 Alarm Length

- The 'No Limit' option means that no alarm timer will be set
- The alarm timer is the same as the sleep timer.
- When an alarm with a timer (anything other than 'no limit') starts, the sleep timer for the zone (or zone group) is triggered.
- Users can override the alarm timer by setting the sleep timer.

Zone linking/unlinking activities

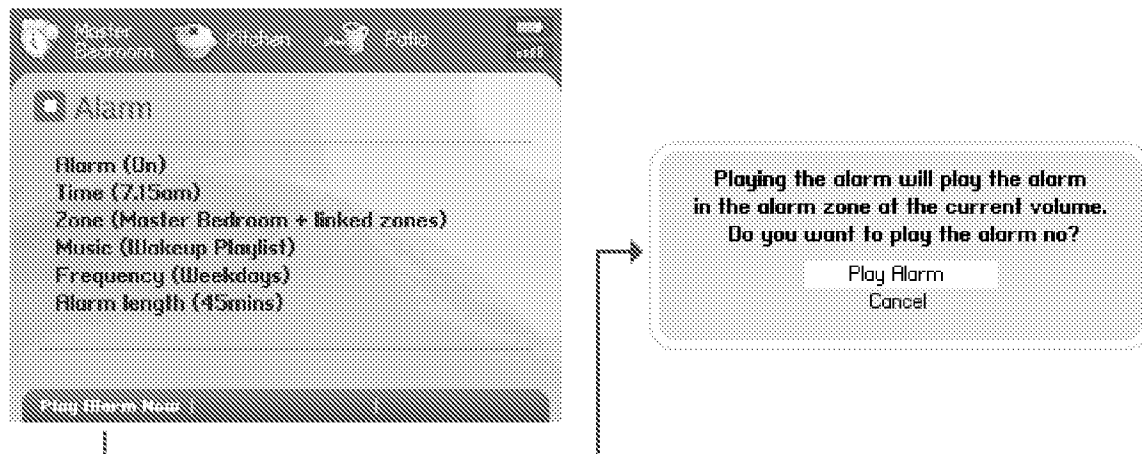
- The alarm length applies to the zone group at the time the alarm is triggered (zone + any linked zones)
- Any zone later added to the group will take on the timer from this alarm.
- Any zone dropped from the group will no longer take part in the alarm length timer.
- Any zone from this group taken by another group will take the timer of the group it is joining (i.e. it will lose it's original timer).
- Pausing the music has no effect on the alarm length timer .
- Clearing the Queue has no effect on a sleep timer .
- Altering the Queue (adding, moving, deleting tracks) has no effect on the sleep timer

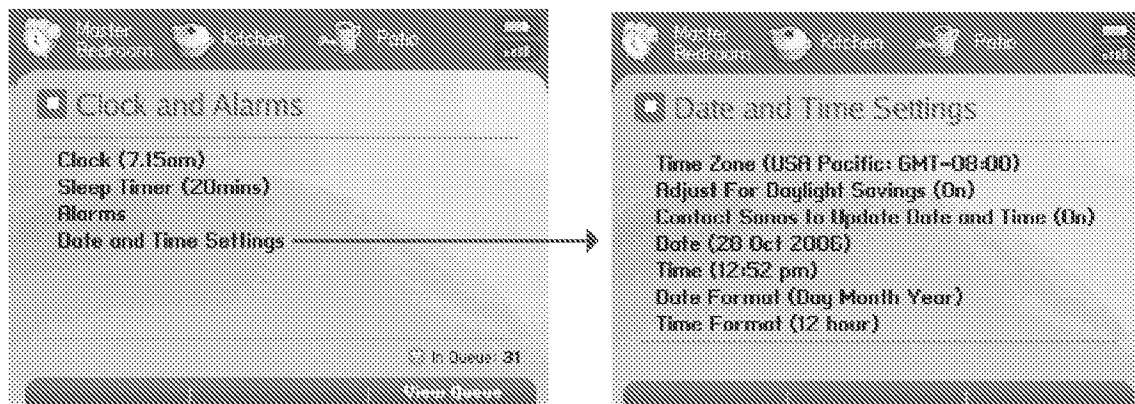
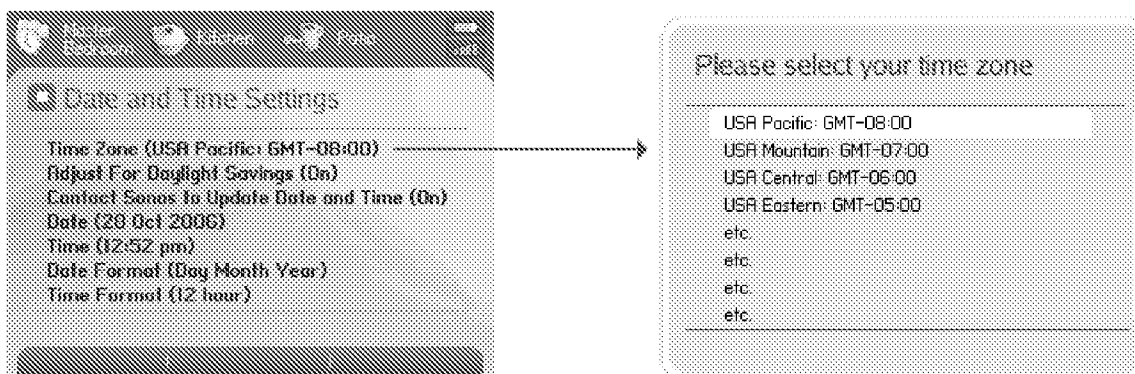
Sonos UI Specification: Alarm Clock

Alarm length/Sleep timer icon on Now Playing Screen

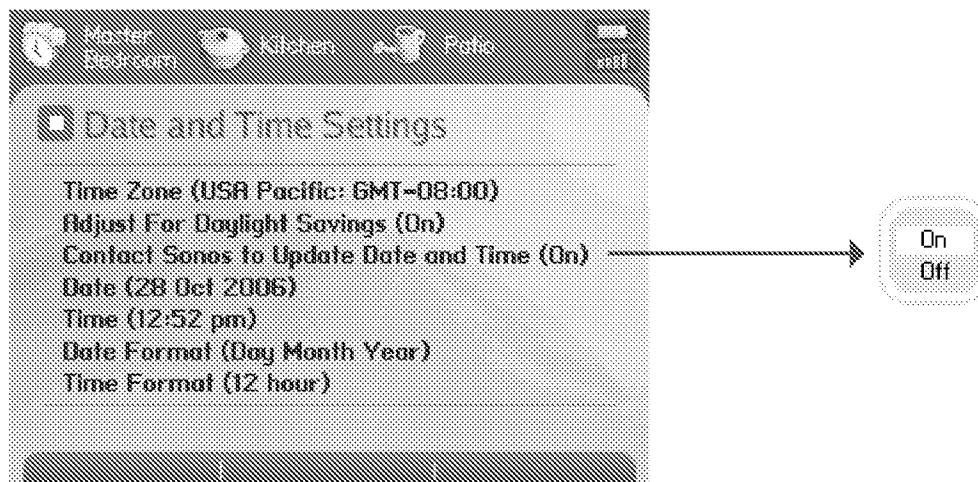
See Section on Sleep Timer earlier in this document.

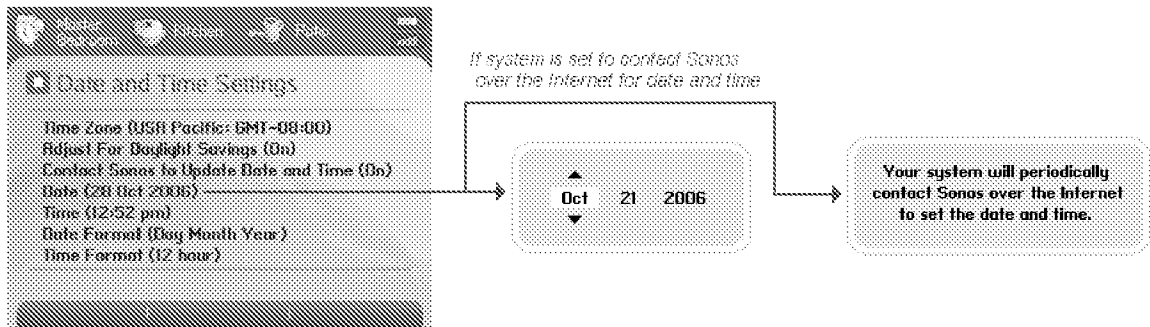
3.7.7 Play Alarm Now



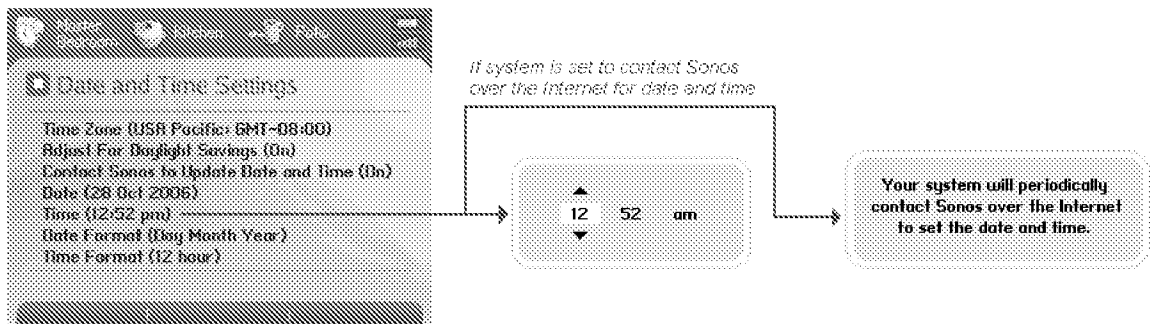
Sonos UI Specification: Alarm Clock**3.8 Setting the current date and time****3.8.1 Time Zone**

Sonos UI Specification: Alarm Clock

3.8.2 Adjust for Daylight Savings**3.8.3 Contact Sonos for Updates**

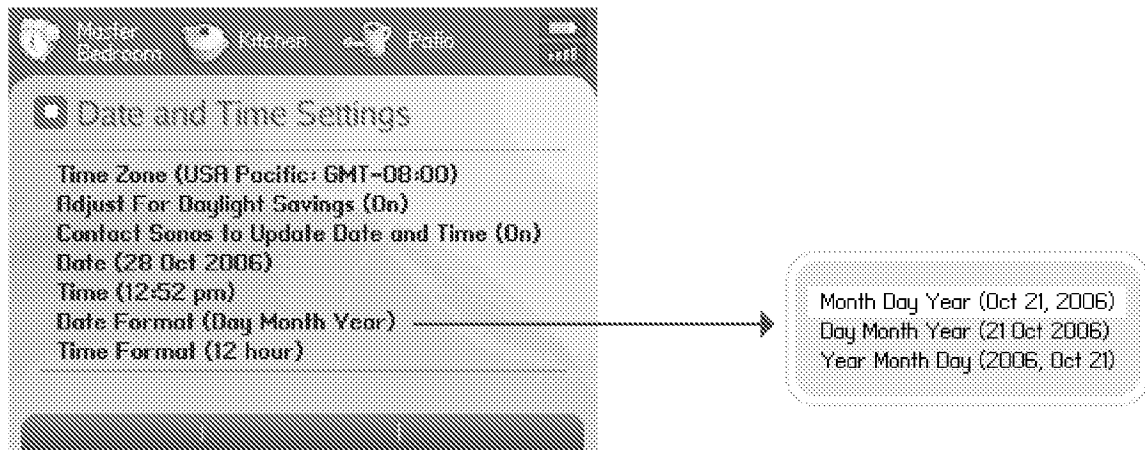
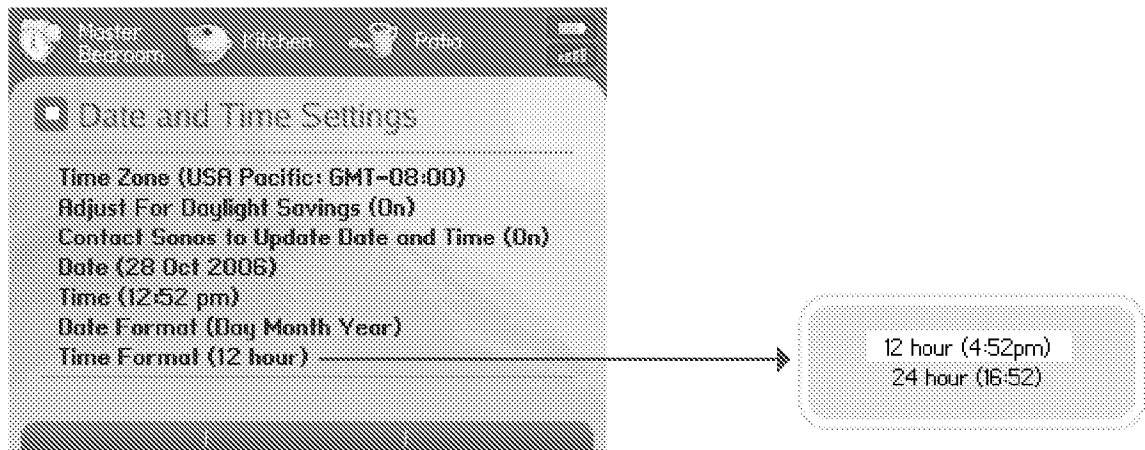
Sonos UI Specification: Alarm Clock**3.8.4 Date**

- If the system is set to get the date and time from the Internet, the user should not be able to manually adjust the date and time.
- In this case, a simple message is shown instead of the date or time editor.

3.8.5 Time

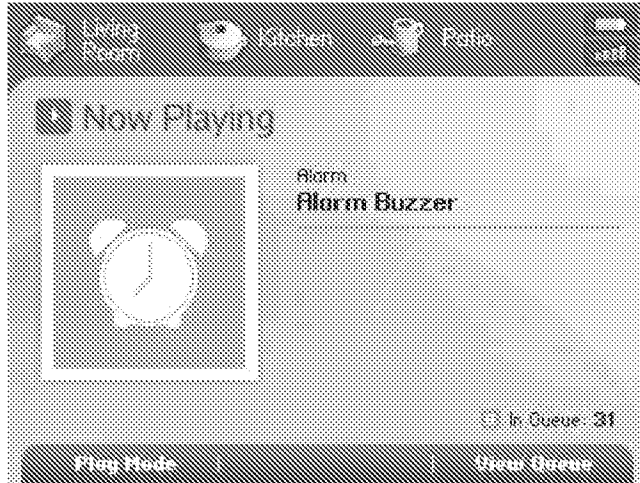
- If the system is set to get the date and time from the Internet, the user should not be able to manually adjust the date and time.
- In this case, a simple message is shown instead of the date or time editor.

Sonos UI Specification: Alarm Clock

3.8.6 Date Format**3.8.7 Time Format**

Sonos UI Specification: Alarm Clock

3.9 Buzzer



- Buzzer has it's own Now Playing screen
- Play/Pause will work the same as regular music
- The template for the Now Playing screen if the Line-In Source Now Playing.

Sonos UI Specification: Alarm Clock

4 UI Spec for DCRs

4.1 PC Menu



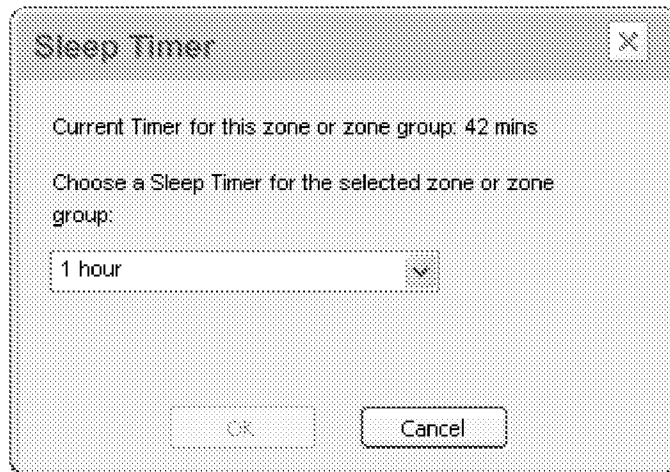
Letter Underscore shortcuts

Current underscore short cuts on this menu: N, P, L, D, Z

Click and Alarms (C)

Sleep Timer (S)

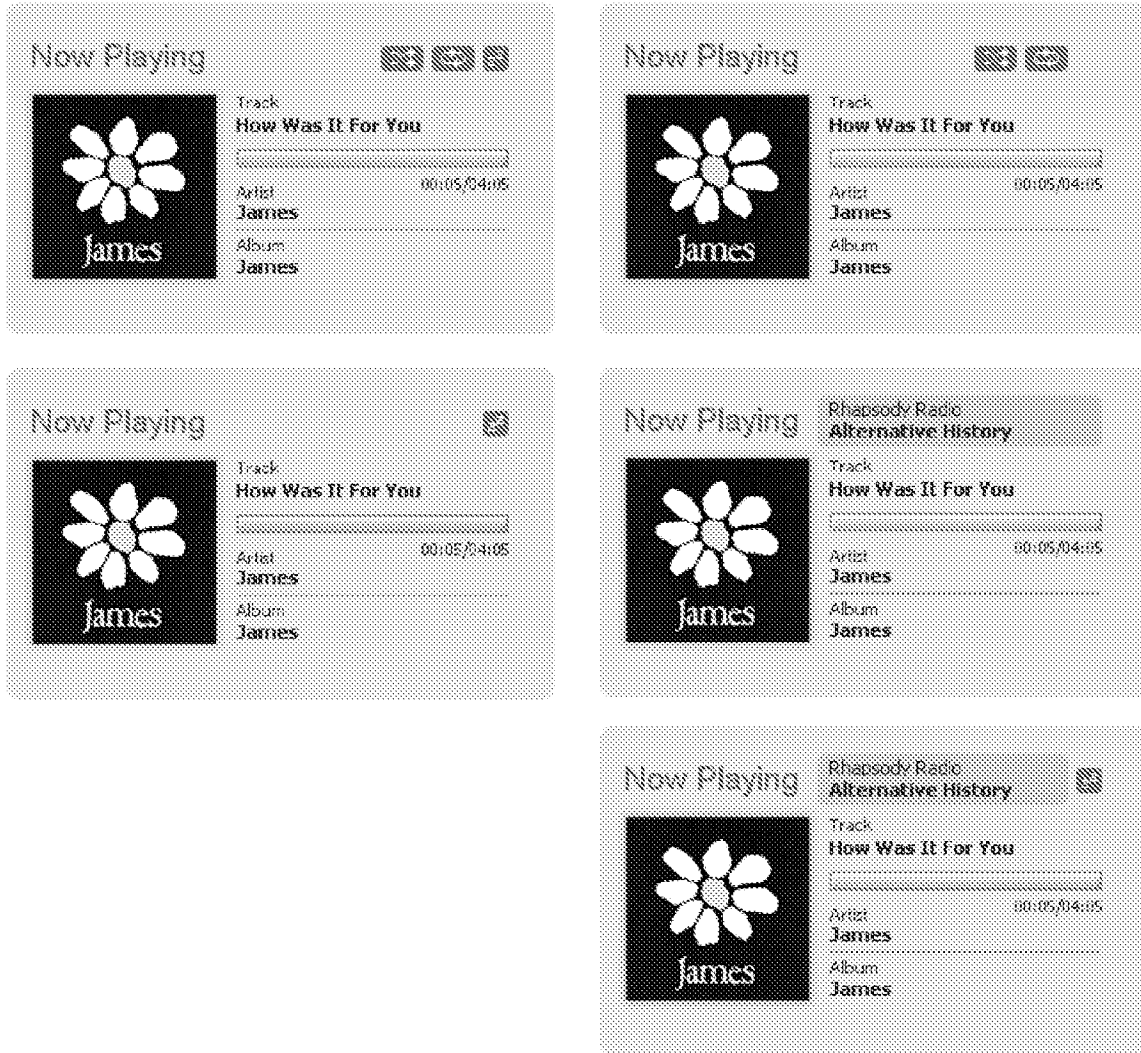
Sonos UI Specification: Alarm Clock

4.2 Sleep Timer

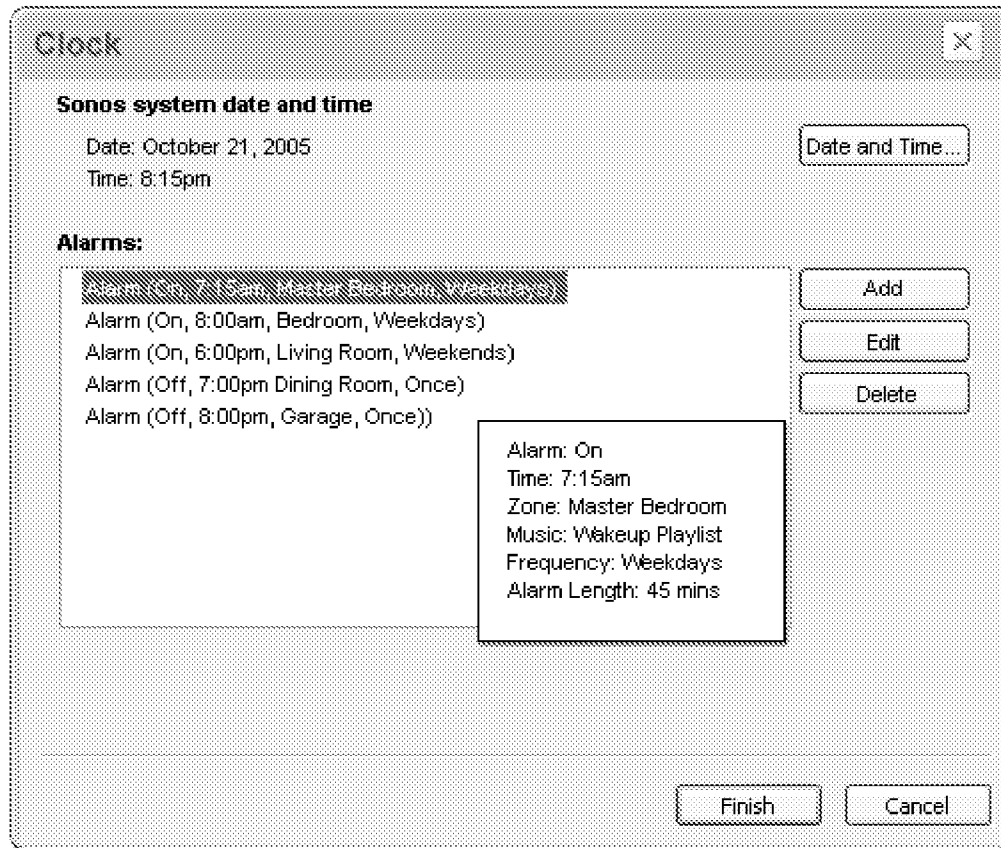
- Sleep timer will have the following variables: Off, 15min, 30mins, 45mins, 1hours, 2 hours.
- A sleep timer applies to all the current zones in the current group
- When the sleep timer stops (i.e. the time reaches 0 seconds), it should revert to 'Off'.
- At the end of the sleep time (0 seconds), the current Zone Group should be Paused.
- The time in parenthesis should show the count down.
- If the current zone group is already paused, no changes to the play head will be made.
- (the alarm timer is the same as the sleep time, described later in this document)

Rules for Zone Group changes while the Sleep timer is active

- A Sleep timer is set for the current zone (or zone group) that the user is viewing on the CR. The timer is applied to all the zones in that particular group.
- Any zone added to the zone group takes on the same timer.
- Any zone dropped from the group will have it's timer reset to Off.
- Any zone taken by another group will take the timer of the group it is joining (i.e. it will lose it's original timer).
- Pausing the music has no effect on a sleep timer .
- Clearing the Queue has no effect on a sleep time .
- Altering the Queue (adding, moving, deleting tracks) has no effect on the sleep timer
- The user can change the timer settings while it is running (i.e. turn it off, or change the sleep time).

Sonos UI Specification: Alarm Clock**The Now Playing screen showing the Sleep Timer/ Alarm Timer**

- The sleep timer icon is shown next to the Shuffle and Repeat icons
- The right edge of the snooze icon aligns with the right edge of the track progress bar
- The separation between the icons is 6 clear pixels
- The blue Rhapsody Radio 'bubble' should be horizontally resized when the snooze icon is present.
- The gap between the right edge of the blue bubble and the left edge of the snooze icon should be 6 clear pixels.
- The snooze icon should sit vertically in the middle of the blue bubble (in actual fact it will be off-centre (lower) by one pixel).
- The Shuffle and Repeat icons will need to be lowered to align horizontally with the snooze icon.
- TBD – can a tooltip rollover show the remaining time.

Sonos UI Specification: Alarm Clock**4.3 Clock and Alarms**

TBD –state when the time has been lost (due to power failure for instance)

Alarm List

- Shows each alarm with a list of major attributes (but not all attributes)

Tool Tips

Tip box shows an overview of all the Alarm's attributes

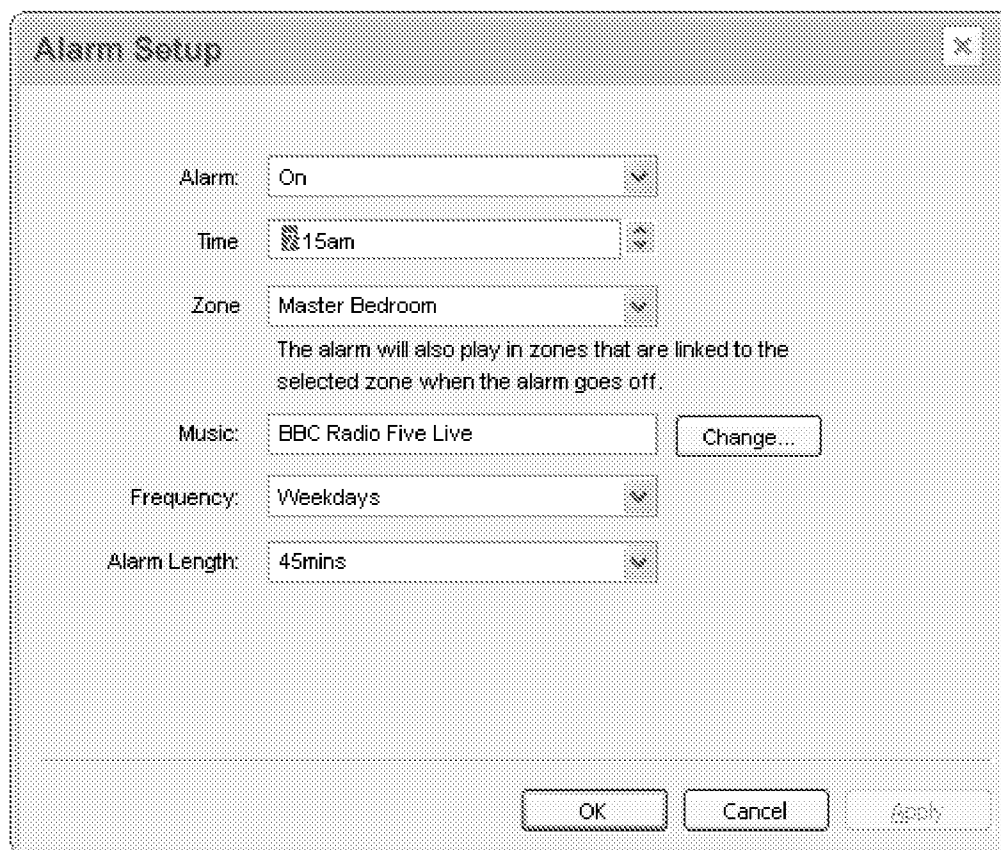
Add Alarms

- Alarms are named with standard names – no custom names for alarms.
- The system limits the number of alarms to 32 alarms
- If n alarms is exceeded, the following message will show:
 - You can't add any more alarms, please delete an alarm before you add a new one [OK]

Delete

- Following message:
 - Are you sure you want to delete the alarm? [Yes] [Cancel]

Sonos UI Specification: Alarm Clock

4.4 Edit an Alarm

The image shows a screenshot of the 'Alarm Setup' dialog box. The dialog has a title bar with the text 'Alarm Setup' and a close button (X) in the top right corner. The main content area contains several settings:

- Alarm:** A dropdown menu with 'On' selected.
- Time:** A time selection field showing '15am' with a small icon of a clock face to the left.
- Zone:** A dropdown menu with 'Master Bedroom' selected.
- Music:** A text field containing 'BBC Radio Five Live' and a 'Change...' button to its right.
- Frequency:** A dropdown menu with 'Weekdays' selected.
- Alarm Length:** A dropdown menu with '45mins' selected.

Below the 'Zone' dropdown, there is a note: 'The alarm will also play in zones that are linked to the selected zone when the alarm goes off.'

At the bottom of the dialog, there are three buttons: 'OK', 'Cancel', and 'Apply'.

Sonos UI Specification: Alarm Clock

4.4.1 Details of Settings**Alarm**

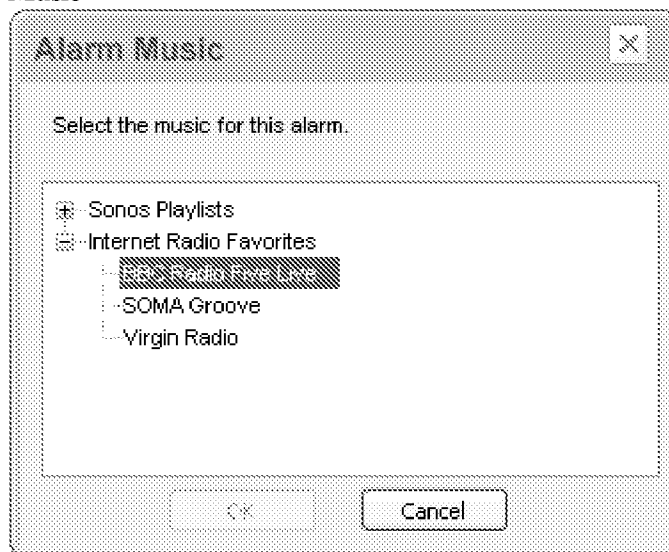
- On
- Off
-

Time

- Same as default Windows/Mac time setting field

Zone

- A single list of the zones in the system is presented.
- The alarm will also sound in any rooms that are linked to the selected zone at the time of the alarm.

Music

- TBD – this could also be a combo-box with sub menus.
- TBD – we may add “Rhapsody Stations” and “Current Queue” to this list.

Frequency

- Once
- Weekdays
- Weekends
- Everyday

Alarm Length

- No Limits
- 15 mins
- 30 mins
- 45 mins
- 1 hour

Sonos UI Specification: Alarm Clock

- 2 hours

- The ‘No Limit’ option means that no alarm timer will be set
- The alarm timer is the same as the sleep timer.
- When an alarm with a timer (anything other than ‘no limit’) starts, the sleep timer for the zone (or zone group) is triggered.
- Users can override the alarm timer by setting the sleep timer.

Zone linking/unlinking activities

- The alarm length applies to the zone group at the time the alarm is triggered (zone + any linked zones)
- Any zone later added to the group will take on the timer from this alarm.
- Any zone dropped from the group will no longer take part in the alarm length timer.
- Any zone from this group taken by another group will take the timer of the group it is joining (i.e. it will lose its original timer).
- Pausing the music has no effect on the alarm length timer .
- Clearing the Queue has no effect on a sleep timer .
- Altering the Queue (adding, moving, deleting tracks) has no effect on the sleep timer

The Now Playing screen showing the Sleep Timer/ Alarm Timer

See Section for Sleep Timer earlier in this document.

Sonos UI Specification: Alarm Clock

4.5 Setting the current date and time on the Desktop Controllers

During the initial setup Wizard, if the DCR is creating a new system (i.e. not just joining an existing system) – the date and time from the PC will be captured and used for the Sonos clock..

Set Up Date and Time

Time zone: Central Standard Time (US and Canada)

☒ Automatically adjust the clock for daylight savings changes

Date format: Day Month Year

Time format: 12 hour

☐ Set the date and time from the Internet

☒ Set the date and time manually

14 April 2006

12:39 PM

Ok Cancel

Sonos UI Specification: Alarm Clock**4.6 Setting alarm music directly from the Music Library**

This feature is TBD pending feedback from John B.



Should the user be able to add to a New alarm – in which case the edit alarm panel should then open.

4.7 Buzzer

- Buzzer has it's own Now Playing screen
- Play/Pause will work the same as regular music
- The template for the Now Playing screen if the Line-In Source Now Playing.

5 Date and Time formats

5.1 Date Formats

Three date formats will be provided

Date Month Year (DMY)

Month Date Year (MDY)

Year Month Date (YMD)

Desktop Controllers

Months are written in full

(MDY) October 21, 2006 (date should be followed by comma)

(DMY) 21 October 2006 (no commas)

(YMD) 2006 October 21 (no commas)

Handheld Controllers

Months will be abbreviated to 3 or 4 letters.

Days of the week (clock face only) will be abbreviated to 2 or 3 letters

Setup screens and menus will show:

(MDY) Oct 21, 2006

(DMY) 21 Oct 2006

(YMD) 2006 Oct 21

For the clock screen, use shortened versions of the day of the week.

(MDY) Mon, Oct 21, 2006

(DMY) Mon, 21 Oct 2006

(YMD) 2006 Oct 21, Mon

Abbreviations for English are as follows:

Mon, Tue, Wed, Thu, Fri, Sat, Sun

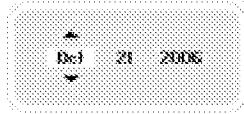
Jan, Feb, Mar Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec

Setup dialogs

Setup dialogs that show separate fields for fields will not contain commas or colons

For example, the following setup dialog does not contain a comma, even though the date is written-out with a comma (**Oct 21, 2006**)

Sonos UI Specification: Alarm Clock

**5.2 Time Formats**

Two time formats will be provided

12 hour clock (am/pm)

24 hour clock

A colon (:) should be used to separate hours and minutes. Seconds are not used anywhere in the UI.

12 hour

HH:MM_am (where am, pm are localized)

24 hour

HH:MM

Single digit times should not be expressed with a leading zero

12 hour clock

Use 6:17 am

Don't use 06:17 am

24 hour clock

Use 6:17 and 0:12

Don't Use 06:17 and 00:12

5.2.1 Date Range limits

It will be possible to set the clock and alarms from 12.00am year 2000 to 11.59 2099.

6 Special Cases

6.1 Lost ZonePlayers and Hidden ZonePlayers - HHCR

No ZonePlayers in the system - UI reverts to the Zone menu with limited settings. Access to Clock and Alarms is not possible.

Only Hidden ZonePlayers in the system - reverts to the Zone menu with limited settings. Access to the Clock and Alarms is not possible.

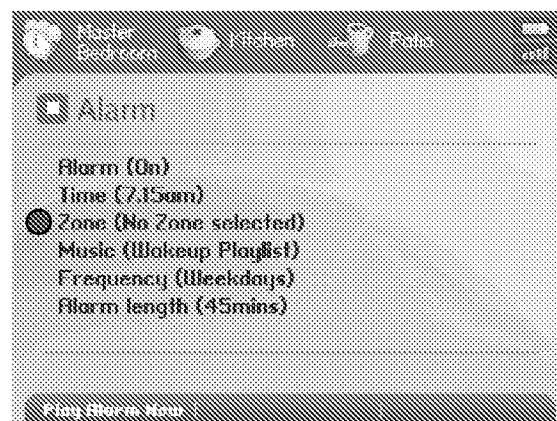
If a zone assigned to an alarm becomes lost, or hidden



Alarm Overview shows a hidden, or non-available zone



Zone available (normal state)



No Zone Available, or Zone is hidden.

Sonos UI Specification: Alarm Clock

- If a zone becomes unavailable, or it becomes a hidden Extender, the Alarm zone menu item will show “No Zone Selected”. The alarm will not sound. The Alarm should however remain in the ‘On’ state (in the case of a ZP that is temporarily unplugged).
- If the ZP becomes available again (Plugged back in, or brought out of extender mode), the Alarm zone will show the ZonePlayer name.
- If an alarm is renamed, the Alarm zone menu item will show the new name.

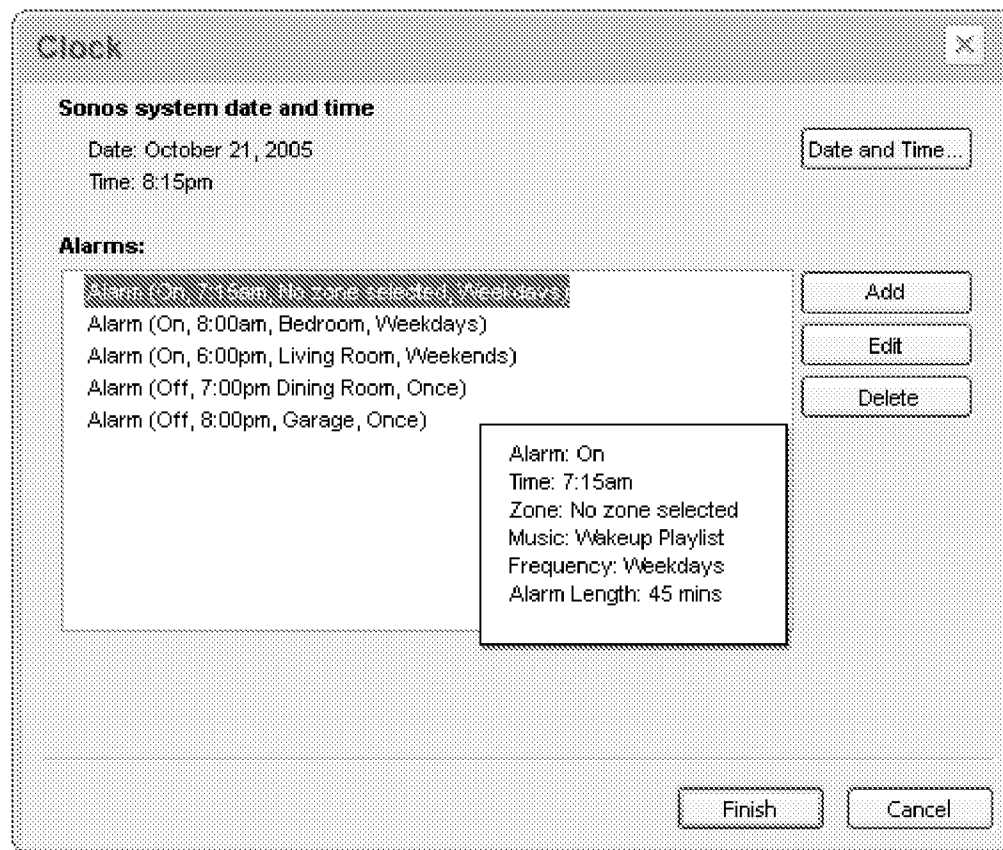
Sonos UI Specification: Alarm Clock**6.2 Lost ZonePlayers and Hidden ZonePlayers - DCRs**

No ZonePlayers in the system or if all ZonePlayers become hidden

Clocks and Alarms menu item will be grayed-out.

However, if the Clocks and Alarms dialogs are already open:

- The Alarms overview panel will remain open if no Zones are present, but all the alarms in the table should be cleared.
- Likewise the Add, Edit and Delete buttons will be grayed-out.
- The date and time should also be cleared, and the "Date and Time" Settings button should be grayed-out.
- If the "Edit" alarms modal dialog/sheet is open, All selections should be grayed-out, except 'cancel'.



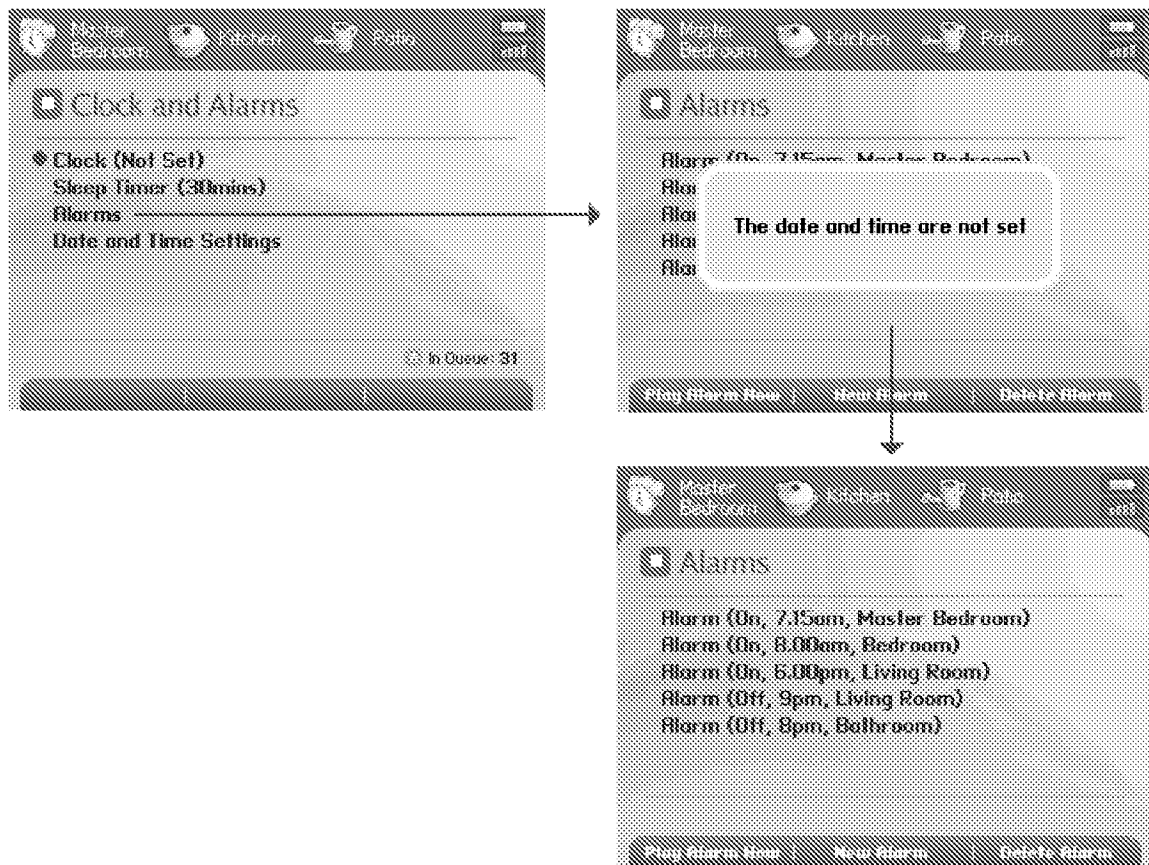
Sonos UI Specification: Alarm Clock

6.3 No Date or Time - HHCR

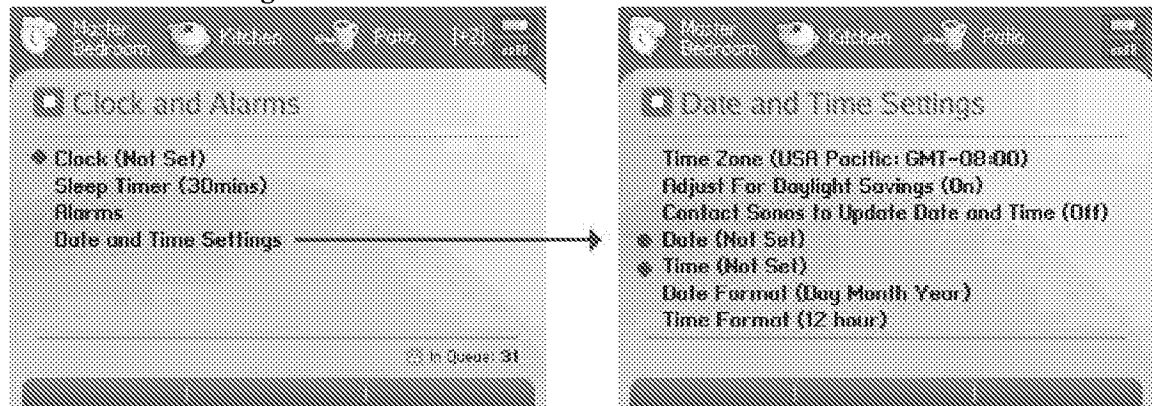
Date and Time can be lost if:

- The date and time are set manually and all the ZPs in a system lose power
- Date and Time are set to Internet time, the Internet connection is broken and all the ZonePlayers lost power.

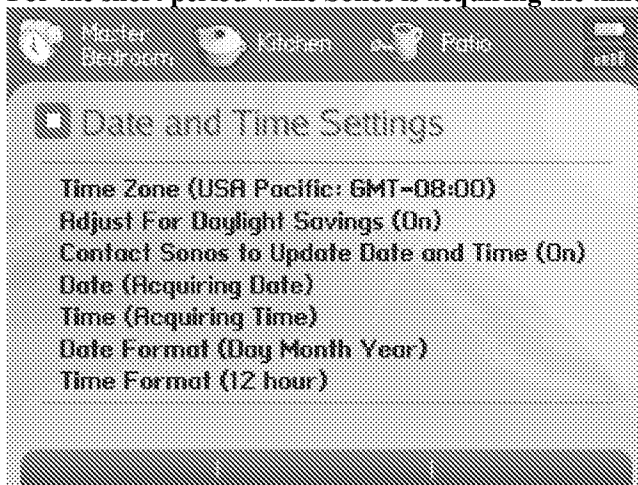
Main Clocks and Alarm screen**Clock Screen**

Sonos UI Specification: Alarm Clock**Alarms Overview Screen**

Nice to have, if user tries to view/set alarms while there is no time, we show a dialog box that informs the user (but doesn't prevent them from viewing and editing the alarms).

Sonos UI Specification: Alarm Clock**Date and Time Settings**

For the short period while Sonos is acquiring the time, but it is not yet set



It is proposed that we only show 'acquiring' on the Date and Time settings page.

The 'acquiring' message does not need to propagate to other screens of the UI.

Sonos UI Specification: Alarm Clock

6.4 No Date or Time - DCRs

Set Up Date and Time

Time zone: Central Standard Time (US and Canada) - Indiana

☒ Automatically adjust the clock for daylight savings changes

Date format: Day Month Year

Time format: 12 hour

☐ Set the date and time from the Internet

☒ Set the date and time manually

14 April 2006

12:39 PM

Ok Cancel

- The red text under the Internet date and time communicates that the Internet connection to SonosTime is not available. At this stage the system will be either counting time using its internal clock, or the time will be not set.